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Oracle Fusion Middleware User's Guide for Oracle Portal, 11g Release 1 (11.1.1)

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Preface

This manual describes how to use Oracle Portal (Oracle Portal) to build a portal, and how to use that portal to your best advantage. Assuming that all configuration tasks have been completed (see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* for those tasks), this book assists with considering how best to construct your portal, how to build the portal with attractive and professional looking pages, how to load those pages with content, and how to make that content easy for others to find.

Note: For the portable document format (PDF) version of this manual, when a URL breaks onto two lines, the full URL data is not sent to the browser when you click it. To get to the correct target of any URL included in the PDF, copy and paste the URL into your browser's address field. In the HTML version of this manual, you can click on a link to directly display its target in your browser.

Audience

This manual is divided into four volumes:

- Volume 1, *Understanding Oracle Portal*, provides information about moving around the portal, setting personal options, and locating content within the portal's pages.
- Volume 2, *Planning Your Portal*, provides information about creating a page group framework and preparing the portal for others to populate with content.
- Volume 3, *Creating Pages and Designing the Layout and Appearance of Pages*, provides information about Oracle Portal's basic and advanced page design features for creating pleasing, useful pages.
- Volume 4, *Working with Content and Advanced Page Design Features*, provides information about using WebDAV with Oracle Portal, translating portal content, setting up an approval workflow, and enhancing your portal's performance. These volume also contains appendixes that supplement the information provided in all four volumes.

There are many definitions of the term *user* as it pertains to this manual. Each volume is dedicated to one or more particular sets of users. These sets are described in the next few sections.

What Is a Public User?

Public users are users who access a portal without logging in. When users first access a portal, they access it as public users, whether or not they have the ability to log in.

Public users can view any page that has been marked as *Public* by the page manager, but they cannot edit the content of pages. Volume 1 defines the concept of a *portal* and assists public users with locating content and viewing pages.

What Is an Authenticated User?

Authenticated users are users who have logged in to a portal. Authenticated users can edit and delete the objects they create, such as pages, styles, and content. Authenticated users can also have additional responsibilities or be granted additional specific privileges on objects created by other users. An authenticated user's privileges may vary from object to object.

Authenticated users will use Volume 1 for basic things like learning to navigate the portal and locating portal content, and Volume 3 for things like creating pages and editing and deleting objects.

What Is a Content Contributor? A content contributor is an authenticated user who can add content to a page. The person who creates (or manages) a page decides who can contribute to the page. There are two levels of contributor:

- The page privilege *Manage Content*
Contributors with this privilege can add new items to the page and edit and delete any item in the page. Such users can also add and remove portlets.
- The page privilege *Manage Items With Approval*
This page privilege is available when approvals and notifications are enabled for the page's page group. Contributors with this privilege can add items to the page and edit any existing item. Revisions and additions are not published in the portal (that is, displayed to other users) until they are approved. Contributors can track the items waiting for approval through the My Approval Status portlet. Such users can also personalize page content.

What Is a Page Designer? A page designer (also known as *page manager*) is an authenticated user with the page privilege *Manage* on a page. A user with this privilege can perform any action on the page and can create sub-pages under the page. The page designer is often responsible for designing the layout (or region configuration) of the page and assigning privileges on the page to other users (for example, to determine who can add content to the page). The scope of a page designer's control over a page may be limited if the page is based on a template.

Page designers will find Volume 3 most useful for completing their tasks.

What Is a Page Group Administrator? A page group administrator is an authenticated user who has full privileges on the structure, style, and content of a page group, and can view, edit, and delete any object in that page group, including pages and styles that are otherwise secure from unprivileged users. A page group administrator can also assign page group privileges to other users.

When a page group is created, the user who created the page group is automatically assigned as its administrator. This user can also edit the page group to assign a different page group administrator.

Volume 2 assists page group administrators in establishing the page group structure and choosing settings that are appropriate for the target user base.

Note: A page group administrator cannot create new page groups or users. These are tasks performed by the portal administrator.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Documents

For more information, see the following manuals in the Oracle Portal documentation set:

- *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*
- *Oracle Fusion Middleware Developer's Guide for Oracle Portal*

Note: You can find all documentation related to Oracle Portal, including the release notes, on the Oracle Portal documentation page of the Oracle Technology Network:

<http://www.oracle.com/technology/products/ias/portal/documentation.html>

You may also find the following manuals from the Oracle Fusion Middleware documentation set useful:

- *Oracle Fusion Middleware Concepts*
- *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*
- *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Part I

Understanding Oracle Portal

Part I contains the following chapters:

- [Chapter 1, "What Is Oracle Portal?"](#)
- [Chapter 2, "Interacting with Your Portal"](#)

What Is Oracle Portal?

This chapter offers a brief, high-level overview of the terms and concepts that are helpful to know as you interact with your portal on a daily basis. If you read about something that you do not see within your portal, it's probably because the designers and builders of your portal chose not to implement that particular feature.

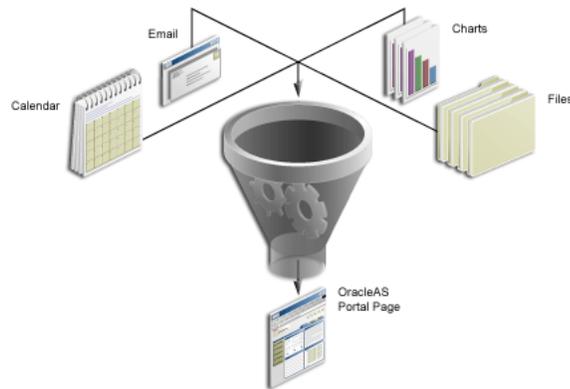
Note: If you are the page group administrator, you can most likely skip this chapter; a more detailed treatment of this material is contained in [Chapter 5, "Preparing to Add Content"](#).

1.1 What Is a Portal?

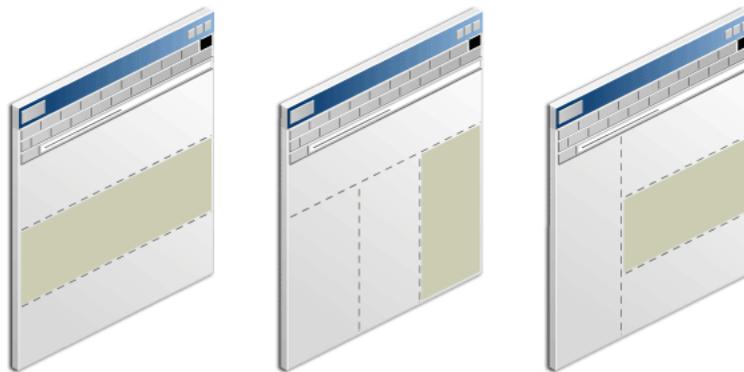
Simply put, a portal enables you to interact with information from many different sources through a single interface. In Oracle Portal terms, that interface is called a *page*. The portal itself is a collection of pages.

[Figure 1-1](#) shows how the data and applications that you rely upon to do your job can all be brought together on a single Oracle Portal page, making it easy for you to get things done without having to constantly navigate your way through your desktop or network.

Figure 1-1 Data from Many Sources On a Single Page



If you're a user who is just going to look at pages and not add anything to them, you probably don't need to know much about how pages are structured. If you're going to add content to pages, however, or even change existing content, it's important that you know a bit about what goes into creating a page. Let's take a closer look at a conceptual illustration of three different pages:

Figure 1–2 Three Different Page Configurations

In this illustration, the dashed lines forming rectangles depict independent areas of a page called *regions*. Like most pages, those shown here contain a region along the top for the *banner*, which displays the corporate name and logo. The actual content appears in the body of the page; in these pages, the body consists of three regions, each in a different configuration. Each region is a completely independent area of the page that can display data from vastly different sources. If you were a Human Resources professional, for example, one region might contain the Oracle Human Resources Application, another might have your e-mail application, and the third might display a chart that shows each employee’s name, department name and number, and current salary. In most cases, what appears in each region is determined by the page designer.

Although a page like the one just described might prove extremely valuable to an HR employee, it’s unlikely that a single page could provide all the information relevant to a given role. One might need to access a page covering corporate news and events, for example, or a collaborative page enabling the entire department to share and exchange information. In Oracle Portal, you can create links or tabs to all the pages you use the most, keeping only the most important information right at your fingertips.

If you’re a typical end user, the pages you access most frequently will be built for you by other people at your site. However, depending on your *privilege level*, you may have the ability to add *content* to one or more pages.

1.2 What Is Content?

In Oracle Portal, content comes in two forms: items and portlets. An *item* is something that you explicitly create or add to your portal page. A file is a type of item; so is a block of HTML code, a link to another page, a zip file, and so on. A *portlet* is a reusable component that is created by someone else—someone at your site, perhaps, or perhaps by Oracle or one of Oracle’s partners. For example, to make your company’s e-mail application available to you as a portlet, someone with programming expertise must use Oracle Portal’s APIs (application programming interfaces) to enable communication between Portal and that e-mail application. Once the portlet is created, anyone with the proper privileges can simply drop that e-mail portlet onto a page.

Oracle Portal makes it easy to work with items on pages, once the appropriate privileges have been established. For example, you can use a step-by-step wizard to help you add, edit, or delete items from your pages, or, if you have a WebDAV client such as Web Folders available, you can seamlessly drag and drop files and folders back and forth between your desktop and Oracle Portal pages.

Keep in mind that just because you have add or edit privileges on a page, you may not see your changes reflected on the page immediately. That's because there are further gradations of privileges beneath the overarching "write" privilege, to help page designers control what is displayed to large audiences and when. If you have Manage With Approval privileges on a page, your changes and additions must be approved by one or more people before it becomes visible to others. To help you keep track of the status of those items, you'll want to have the My Approval Status portlet on one of your frequently used pages so you can see whether your content has been approved, rejected, or is still pending.

Figure 1–3 My Approval Status Portlet

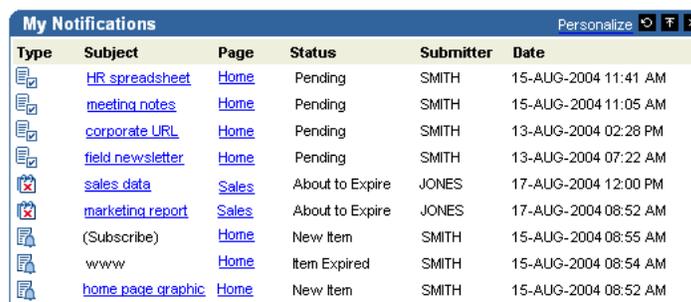


Subject	Page	Status	Approver	Date
Marketing report for September	Home	Pending	JONES	30-NOV-2004
Marketing report for August	Home	Rejected	JONES	30-AUG-2004
Marketing report for July	Home	Approved	JONES	30-JUL-2004

1.2.1 Keeping Up with Changes

Because the information contained in portlets is dynamic, you don't have to do anything to ensure that you always have the latest information. But how do you make sure that you're notified if something changes in one of possibly hundreds of pages and items that impact you? Oracle Portal helps you keep tabs on important pages and items with its subscription and notification services. When you subscribe to an item or page, an alert is sent to your My Notifications portlet to notify you of the change.

Figure 1–4 My Notifications Portlet



Type	Subject	Page	Status	Submitter	Date
	HR spreadsheet	Home	Pending	SMITH	15-AUG-2004 11:41 AM
	meeting notes	Home	Pending	SMITH	15-AUG-2004 11:05 AM
	corporate URL	Home	Pending	SMITH	13-AUG-2004 02:28 PM
	field newsletter	Home	Pending	SMITH	13-AUG-2004 07:22 AM
	sales data	Sales	About to Expire	JONES	17-AUG-2004 12:00 PM
	marketing report	Sales	About to Expire	JONES	17-AUG-2004 08:52 AM
	(Subscribe)	Home	New Item	SMITH	15-AUG-2004 08:55 AM
	www	Home	Item Expired	SMITH	15-AUG-2004 08:54 AM
	home page graphic	Home	New Item	SMITH	15-AUG-2004 08:52 AM

If you are part of an approval chain, the My Notifications portlet also notifies you when something requires your approval. For example, if you must review all HR policies before they are published company-wide, you'll receive an alert when a policy requiring your approval has been published. The policy won't be displayed publicly until you explicitly approve that item.

1.2.2 Controlling Content Handling

Oracle Portal provides many methods to help ensure that items are handled appropriately within your site. For example, you may find that in order to update an item, you first have to *check out* the item. While you're making your changes, no one else can edit the item, although authorized viewers can still see the item as it was before you checked it out. Once you've checked in the updated item, what happens to the older version? That depends on which *versioning* options have been established for the item. Depending on the requirements for a particular item, a new version of an

item may or may not replace an existing version as the current copy; a copy of the old version may or may not be retained. While keeping older versions handy makes it easy to track changes made to a document over time, such records may not be necessary for all items.

To help you control when people see your work, you can specify a *publish date* for an item, which means it won't be visible to anyone (except you) before the date you supply. You can also set an *expiration date* to automatically hide items that are no longer relevant or important. And if *item level security* is enabled, then you can state who can see, edit, or manage the items that you contribute.

Again, your page group administrator controls which of these options are available to you. Contact that person if you want to take advantage of some of the features just described.

1.3 Finding Content

Oracle Portal provides a robust search component to help you find the content you're looking for. Depending on how the authors of your portal have set things up, your search strings can be compared against a wide variety of classifications, including the name of the item, the author, a description, and keywords associated with the purpose or theme of the item. Oracle Portal also enables you to instigate more complex searches using boolean logic, such as all pay stubs belonging to a certain employee, or all corporate announcements made on a given date. In addition, you can save your searches and assign them unique names so that you can use them again later without having to re-enter a complicated series of terms. (Keep in mind that although Portal provides all these capabilities, it's up to the people who build your portal to make them available to you and other users.)

1.4 Personalizing Your Portal

Like all aspects of Oracle Portal, the extent to which you can personalize your interface depends upon the level of privileges that have been granted to you by a page designer or administrator. Assuming you have log-in privileges, you will most likely be able to select your own home page and your own log-in password, and you might be able to select the page style you prefer as well. A *page style* determines the colors and fonts in which the pages you view are rendered.

At the page level, you may have complete authority over your own personal page or home page, but none at all on other pages that are available to the entire company. On some pages, you may be able to personalize portlets to suit your own needs and preferences, or you may be able to hide certain portlets completely so that they don't appear on your page. Going a step further, you may even be able to add to or delete portlets from a page. (You'll know you can add content to a page if you see the Edit link in the top right corner of your page. If you don't see it, you don't have the proper privileges.)

Interacting with Your Portal

This chapter contains information that public users and users with *Personalize* privileges need to know. It includes the following main sections:

- [Section 2.1, "Viewing Pages"](#)
- [Section 2.2, "Finding Information in Your Portal"](#)
- [Section 2.3, "Personalizing Pages"](#)
- [Section 2.4, "Subscribing to a Page or Item"](#)
- [Section 2.5, "Accessing Oracle Portal Page Editing Tools"](#)
- [Section 2.6, "Adding Content to a Page"](#)
- [Section 2.7, "Getting Your Content Approved"](#)
- [Section 2.8, "Troubleshooting"](#)

Intended Audience

The content of this chapter is intended for public users and users with *Personalize* privileges. If a particular task requires different privileges, the required privileges are listed before the steps of that task.

2.1 Viewing Pages

This section contains information on how to display pages and describes other actions available while viewing pages. To perform the actions described here you must be logged in to Oracle Portal:

- [Section 2.1.1, "Logging in to Oracle Portal"](#)
- [Section 2.1.2, "Displaying a Page"](#)
- [Section 2.1.3, "Understanding Page and Item URLs"](#)
- [Section 2.1.4, "Choosing Your Home Page"](#)
- [Section 2.1.5, "Changing Your Password"](#)
- [Section 2.1.6, "Choosing a Default Page Style"](#)
- [Section 2.1.7, "Viewing Translated Content"](#)

2.1.1 Logging in to Oracle Portal

Your page may display a Login link (or icon) or the Login portlet. To log in to Oracle Portal, either:

- Click the Login link (or icon) and then enter your user name and password.
- Use the Login portlet to enter your user name and password.

If you do not know your user name or password, contact your portal administrator.

2.1.2 Displaying a Page

If you are logged in to Oracle Portal, you can view any page on which you have been granted at least *View* privileges. If you are not logged in to Oracle Portal, you can view only pages that are available to public users.

When you display a page, you see only the content that you are authorized to see.

To display a page:

- In the Address or Location field of your browser, enter the URL for the page. The URL will look something like this:

```
http://portalmachine:1000/myportal/page/mydad/myPageGroup/mypage
```

If you do not know the URL of the page, you might be able to access the page using navigation tools on your home page.

If you do not see the page that you want to display, you probably don't have appropriate access privileges on the page.

2.1.2.1 Refreshing a Page

If your page contains a **Refresh** link, click the link to regenerate the page and view the most up-to-date version of the page.

Note: Page designers with at least *Manage Content/Manage Items With Approval* privileges on a page can add Refresh links. See [Section 13.6.6, "Adding a Portal Smart Link Item."](#)

2.1.2.2 Refreshing a Portlet on a Page

If your portlets contain a **Refresh** icon in the portlet header, you can refresh the portlet content without having to refresh the entire page. See [Section 10.2, "Configuring Region Display Options."](#)

2.1.2.3 Viewing New Items on a Page

If a **New** icon is displayed besides any item on a page, click **New** to display a list of all newly created items in the page group. See [Section 5.5.4, "Displaying the New and Updated Icons."](#)

2.1.3 Understanding Page and Item URLs

In Oracle Portal, two types of URLs are used to access or bookmark portal objects: *path-based URLs* and *durable URLs*.

Path-based URLs

A *path-based URL* identifies the path taken through the portal to get to a particular object. It is an easy-to-read URL but as it contains the names of portal objects, the URL becomes invalid if the name of any object within the path changes.

For example, if you navigate to an item and look in your browser's address bar, the format of the path-based URL will look something like this:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/<page_group_name>/<page_path>/<item_name>
```

For a detailed description of this URL format, see [Appendix C, "Formation of URLs in Oracle Portal."](#)

Here are some examples:

- URL to access the top-level page (mypage) in the page group MyPageGroup:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/mypage
```
- URL to access the current, English version of myDocument.htm on page1:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup/mypage/page1/myDocument.htm
```
- URL to access the third, English version of myDocument.htm:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/ver-3/MyPageGroup/mypage/page1/myDocument.htm
```
- URL to access a draft or pending version of myDocument.htm:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/ver-STAGE/MyPageGroup/mypage/page1/myDocument.htm
```

Durable URLs

A *durable URL* uses a globally unique identifier (GUID) to identify portal objects. Because the GUID of an object never changes, the URL will continue to be valid if the object name changes.

Note: You can find out the durable link for any item or page by looking in its property sheet. See also [Section 7.3, "Viewing Information About Pages and Page Content."](#)

This is the durable URL format for an item:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/<item_guid>
```

For example, you may be given this URL to access the English version of a page with the GUID A47D41ECA23648A9E030007F0100118A:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/A47D41ECA23648A9E030007F0100118A
```

For a detailed description of this URL format, see [Appendix C, "Formation of URLs in Oracle Portal."](#)

When you click a durable link, Oracle Portal converts the durable URL to a path-based URL and this is why your browser address bar always displays path-based URLs.

Your page designer controls the URL format used for object links in a particular region, for more information see [Section 14.2.6, "Specifying How Item URLs Are Formed."](#) If you right-click a link and copy its target address, you can determine the URL format by pasting the copied link into your browser's address bar.

2.1.4 Choosing Your Home Page

Your home page is the first page displayed when you log in to Oracle Portal, or when you click the *Home* link or icon. If your page contains the *Account Info* link, you can choose your own home page.

For example, if you are a page designer you might want the Build tab (Portal Builder) to be the first page that you see when you log in.

2.1.4.1 Changing Your Home Page

To change your home page:

1. Click **Account Info**.
2. Next to the **Default Home Page** field, click the **List** icon to see a list of pages from which to choose.

You cannot enter a value in this field; you must select one from the pop-up list.

3. Click **Return Object** next to the page you want to make your home page.
4. Click **OK**.

Note: Click **Reset** to remove this setting.

Tip: To check that you set your home page correctly, log out of Oracle Portal and log back in again. When you log back in, you should be taken to the page that you specified as your home page.

2.1.4.2 Changing Your Mobile Home Page

If mobile devices may access your portal, you can specify the home page to be displayed when you access Oracle Portal from a mobile device. The mobile home page is independent from the desktop home page.

To change your mobile home page:

1. Click **Account Info**.
2. Next to the **Default Mobile Home Page** field, click the **List** icon to see a list of pages from which to choose.

You cannot enter a value in this field; you must select one from the list provided. All the pages displayed in this list are mobile pages.

Note: If you do not see the **Default Mobile Home Page** field, mobile access is not enabled for the portal. See also [Section 9.1, "Mobile Support in Oracle Portal."](#)

3. Click **Return Object** next to the page you want to make your home page when you access Oracle Portal from a mobile device.
4. Click **OK**.

Note: Click **Reset** to remove this setting.

2.1.5 Changing Your Password

For security purposes, your password is set to expire after a certain number of days, as specified by the OracleAS Single Sign-On Server administrator. As the expiration date of your password approaches, you will be prompted to change it.

If you think someone may know your password, change it immediately.

If you forget your password, ask the OracleAS Single Sign-On Server administrator to reset it for you.

Note: Changing your password here affects all the OracleAS Single Sign-On Server applications you access, not just Oracle Portal.

If you do not change your password before its expiration date, you will not be able to log in until the OracleAS Single Sign-On Server administrator resets it for you.

To change your password:

1. Click **Account Info**.
2. In the top right corner of the Edit Account Information page, click **Change Password**.
3. In the **Old Password** field, enter the password that you currently use to log in.
4. In the **New Password** field, enter your new password. Enter the same password in the **Confirm New Password** field to confirm that you entered it correctly.

Note: Choose a password that you can remember, but is not obvious to others.

There may be restrictions on what you can use as a password. For example, passwords may be restricted to a minimum number of characters or require at least one number. If you are having difficulty changing your password, contact your OracleAS Single Sign-On Server or portal administrator.

5. Click **OK** to return to the Edit Account Information page.
6. Click **OK** to return to your home page.

The next time you log in, use your new password.

2.1.6 Choosing a Default Page Style

A style controls the colors and fonts used by portal pages. If your page contains an *Account Info* link you can specify a default page style of your choice.

When a page is created, the page designer has the option of imposing a page style or allowing individual users to supply their own. See [Section 11.8, "Applying a Style."](#) When you display a page that allows for individual page styles, the page style you select through the *Account Info* link is applied.

To change your default page style:

1. Click **Account Info**.
2. Choose the **Default Style** from the list.
3. Click **OK**.

If you do not specify a default style, the style of your default group is used instead. If you do not have a default group, or the group default style is also not set, the system default style is used. See also [Chapter 11, "Working with Colors and Fonts."](#)

2.1.7 Viewing Translated Content

If you want to view portal content in a particular language, you must either log in to Oracle Portal in the appropriate language, or change the current language using the Set Language portlet.

Note: If you do not see the language you want, contact your portal administrator. The language may need installing, as described in *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

If your portal contains content that has been translated into the selected language, it is displayed on the page. Any content that is not translated into the chosen language is displayed in the default language (this is the language in which the page group was originally created).

Searching Translated Content

When you search Oracle Portal only *one* translation of a particular item is returned within search results. You do not see several different translations in the search results, even if they all match the search criteria. Content translated for the *current* language is returned first, if it exists. If no match is found in the current language, content for the default language may be returned if a match is found.

2.2 Finding Information in Your Portal

This section contains information on how to find information in Oracle Portal.

- [Section 2.2.1, "Searching For Content"](#)
- [Section 2.2.2, "Interpreting Search Results"](#)
- [Section 2.2.3, "Saving and Reusing Searches"](#)

2.2.1 Searching For Content

Oracle Portal provides a basic search facility for performing simple searches and an advanced search option for performing more complex searches. Both can be used to find items, pages, categories, or perspectives in Oracle Portal. For more details, see:

- [Section 2.2.1.1, "Performing a Basic Search"](#)
- [Section 2.2.1.2, "Performing an Advanced Search"](#)

If you enter a search term and Oracle Text is enabled in your portal, all text attributes associated with the portal content, and the content of documents and URLs are searched. Out-of-the-box, Oracle Text is always enabled. Although we do not recommend that Oracle Text is disabled, it can be disabled by your portal administrator. If your portal administrator has disabled Oracle Text, only the following metadata is searched: item attributes (Display Name, Description, Keywords, Author), page attributes (Display Name, Description, Keywords), and category/perspective attributes (Display Name, Description). For more detail, see [Section A.2.4, "Base Searchable Attributes."](#)

Contact your portal administrator for more information on Oracle Text, or refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* available from the Oracle Portal Documentation page on OTN (<http://www.oracle.com/technology/products/ias/portal/documentation.html>).

2.2.1.1 Performing a Basic Search

If your page contains a Basic Search portlet, you can search for content that contains specific words. For example, if you enter `weights aerobics`, the search finds content (items, pages, categories, perspectives) that contains the word `weights` *and* the word `aerobics`.

Figure 2–1 shows an example of the Basic Search portlet:

Figure 2–1 Basic Search Portlet



Alternatively, your page may contain a Basic Search box item, similar to that shown in Figure 2–2. This item may be set up to search in *all* page groups, or one specific page group.

Figure 2–2 Basic Search Box



To perform a basic search:

1. Enter the words that you want to search for.

Basic search finds content that contains all the specified words. For example, if you enter `weights aerobics`, basic search finds content that contains the word `weights` *and* the word `aerobics`. For more helpful hints and tips on entering search criteria, read our "[Search Tips](#)" in the following section.

2. Choose which page groups are searched:
 - Basic Search portlet - In the **Search In Page Groups** field, select one or more page groups in which to search. If this field does not display, all page groups are searched. For information about how to include this field in the Basic Search portlet, see [Section 2.2.1.1.1, "Personalizing the Basic Search Portlet."](#)
 - Basic Search Box item - The page groups to be searched are pre-selected. You can change this only if you have the privileges to edit the Basic Search Box item.
3. Click **Search** or **Go**.

Search Tips

Here are some notes and tips to consider when searching:

- Searches are not case sensitive.

- To search for multiple words, separate each word with a space, for example: `weights aerobics`. Content containing the word `weights` *and* the word `aerobics` is returned.
- To search for a phrase, enclose the phrase in single quotes, for example: `'weight lifting'`.
- The `%` character is interpreted literally, so do not include it as a wildcard.
- **If Oracle Text is enabled:**
 - All text attributes (see [Section A.2.4, "Base Searchable Attributes"](#)) and the content of documents and URLs are searched.
 - If you enter multiple terms, *all* the terms must appear within the item metadata, or URL content, or document content. For example, if you enter `weights aerobics`, search results are returned only when both these terms are found in item metadata, URL content, or document content. If the term `weights` is found in URL content and the term `aerobics` is found in document content, this does not result in a match.
 - The stem operator is used to search for words that have the same linguistic root as the specified word. For example, if you specified the word `lift`, content containing the words `lift`, `lifting`, or `lifted` is returned.
 - The `%` character is interpreted literally, so do not use it as a wildcard. For example, if you enter the search term `100%`, content containing the text `100%` is returned, not `100` (without `%` appended), `1000` or `10000`. Instead, use the advanced search operator that performs partial matching, that is, *partially match all of the terms* (`%term%`).
- **If Oracle Text is disabled:**
 - Only metadata is searched, that is, item attributes (Display Name, Description, Keywords, Author), page attributes (Display Name, Description, Keywords), and category/perspective attributes (Display Name, Description). See also [Section A.2.4, "Base Searchable Attributes."](#)
 - If you enter multiple terms, *all* the terms must appear within the same attribute. For example, if you enter `weights aerobics`, search results are returned only when both these terms are found in a single attribute, such as Description.
 - The `%` character is interpreted literally, so do not use it as a wildcard. For example, if you enter the search term `100%`, content containing the text `100%` is returned, not `100` (without `%` appended), `1000` or `10000`. Wildcards are automatically added to the beginning and end of your search term, so searching for `100` automatically returns content that contains `1000` and `10000`.
- If you want more advanced search features, click the **Advanced Search** link (if there is one).

2.2.1.1.1 Personalizing the Basic Search Portlet

If this portlet displays the **Search In Page Groups** field, you can restrict your search to one or more page groups. When this field is not available, all page groups are searched. You can choose whether the **Search In Page Groups** field appears on this portlet, by clicking the **Personalize** link. When you personalize the Basic Search portlet, you can also change the name displayed in the portlet header if you wish.

2.2.1.2 Performing an Advanced Search

Use the Advanced Search portlet to:

- Find portal content that contains all (or any) search words.
- Search across one or multiple page groups.
- Restrict the search to a particular page, category, perspective, item type, or various other attributes.
- (Oracle Text enabled) Perform near, like, soundex, and fuzzy searches.
- (Oracle Text enabled) Search across one or more selected perspectives.

Figure 2–3 shows an example of the Advanced Search portlet:

Figure 2–3 Advanced Search Portlet (Oracle Text enabled)

You may access the advanced search in several ways, such as:

- Clicking the **Advanced Search** link on a page or Basic Search portlet.
- Displaying a page containing an Advanced Search portlet.

To perform an advanced search:

1. Enter the words that you want to search for.
Try to be precise when entering your search terms as this will increase the accuracy of your search and avoid timeouts caused by searches taking too long.
2. For **Find results that**, choose one of the search operators described in [Table 2–1](#).

Table 2–1 Search Operators

Search Operator	Description
Contain all of the terms / Contains all	<p>Returns content containing all of the specified terms in any order, as entered or as part of a larger word. For example, if you enter the search terms <code>weights aerobics</code>, advanced search finds content that contains the words <code>weights</code> and <code>aerobics</code>.</p> <p>The behavior of the operators <i>contain all of the terms</i> and <i>contain any of the terms</i> (in the following section) depends on Oracle Text:</p> <ul style="list-style-type: none"> ■ If Oracle Text is <i>enabled</i>, the stem operator is used to search for words that have the same linguistic root as the specified word. For example, if you specified the word <code>lift</code>, content containing the words <code>lift</code>, <code>lifting</code>, or <code>lifted</code> is returned. ■ If Oracle Text is <i>disabled</i> and you enter <code>100%</code> as your search term, content containing the text <code>100%</code> is returned, not <code>100</code> (without % appended), <code>1000</code> or <code>10000</code>. Wildcards are automatically added to the beginning and end of <code>100</code> or your search term, so searching for <code>100</code> automatically returns content that contains <code>1000</code> and <code>10000</code>.
Contain any of the terms / Contains any	<p>Returns content containing at least one of the specified words and may contain more than one, as entered or as part of a larger word. For example, if you enter the search terms <code>weights aerobics</code>, advanced search finds content that contains the word <code>weights</code> or <code>aerobics</code>.</p> <p>The behavior of the operators <i>contain all of the terms</i> and <i>contain any of the terms</i> depends on Oracle Text (see preceding section).</p>
Contain these terms exactly / Contains exactly	<p>(Oracle Text disabled) Returns content containing the search words exactly as specified in the Search field. For example, a search for <code>weight</code> will not return <code>weights</code>.</p>
Partially match all of the terms (%term%) / Partially match all	<p>(Oracle Text enabled) Performs a partial match search of <i>all</i> of the words specified, for example, if you enter <code>100</code> it returns results such as <code>10000</code> and <code>1100BC</code>.</p>
Partially match any of the terms (%term%) / Partially match any	<p>(Oracle Text enabled) Performs a partial match search of <i>any</i> of the words specified, for example, if you enter <code>age 100</code> it returns results such as <code>10000</code>, <code>1100BC</code>, and <code>stage</code>.</p>
Contain these terms located close to each other / Terms near each other	<p>(Oracle Text enabled) Returns a score based on the proximity of the specified words in the content. A higher score is returned for content with the specified words closer together and a lower score is returned for words farther apart.</p>
Sound like all of the terms / Sound like all	<p>(Oracle Text enabled) Searches for content containing words that sound similar to all the specified terms. This allows comparison of words that are spelled differently, but sound alike in English such as <code>Smith</code> and <code>Smythe</code>.</p>
Sound like any of the terms / Sound like any	<p>(Oracle Text enabled) Searches for content containing words that sound similar to any of the specified words. This allows comparison of words that are spelled differently, but sound alike in English such as <code>Smith</code> and <code>Smythe</code>.</p>
Are spelled like all of the terms / Spelled like all	<p>(Oracle Text enabled) Searches for content containing words that are spelled similarly to all the specified words. This is helpful for finding more accurate results when there are frequent misspellings in the content such as <code>there</code> and <code>their</code>.</p>
Are spelled like any of the terms / Spelled like any	<p>(Oracle Text enabled) Searches for content containing words that are spelled similarly to any of the specified words. This is helpful for finding more accurate results when there are frequent misspellings in the content such as <code>there</code> and <code>their</code>.</p>

Table 2–1 (Cont.) Search Operators

Search Operator	Description
Match this query language expression / Matches query	(Oracle Text enabled) Searches for content using an Oracle Text query expression. For examples, see Table 2–2, "Sample Oracle Text Query Expressions" . For more detail, refer to the <i>Oracle Text Reference</i> available from the Oracle Technology Network at http://www.oracle.com/technology/documentation .

Table 2–2 Sample Oracle Text Query Expressions

Oracle Text Query Expression	Searches for content containing...
policy and benefit	policy and benefit
policy & benefit	policy and benefit
policy or benefit	policy or benefit
policy benefit	policy or benefit
retirement and (policy benefit)	retirement and either policy or benefit
benefit not retirement	benefit but not retirement

3. In the **Search In** field, select one or more **Page Groups** in which to search.
If this field does not display and providing that you have not restricted your search to one or more pages (see next step), all page groups are searched.
4. Select a **Page** in which you want to search.
Select **Include sub-pages** if you also want to search in pages beneath the page you specified.
If you specify one or more page groups to search, you should select only pages in the page groups specified.
5. In **Filter By**, click:
 - **Match All Of The Following** to search for content that matches *all* the attribute search criteria, for example content that contains the word *aerobics* in its title *and* was added after 10-OCT-04.
 - **Match Any Of The Following** to search for content that matches *any* of the attribute search criteria, for example content that contains the word *aerobics* in its title *or* was added after 10-OCT-04.
6. From the **Perspective** and **Category** lists, choose the perspectives and categories in which you want to search.
 - These lists show only the categories and perspectives relevant to the page group chosen in the **Page Group** list. If a single page group is selected, categories and perspectives of that page group and the Shared Objects page group are displayed. If multiple page groups are selected, only categories and perspectives in the Shared Objects page group are displayed.
 - These lists may not be labeled **Perspective** and **Category** if the page group administrator has changed the labels.
 - If Oracle Text is enabled, you can choose more than one perspective. You can perform a search that **Matches All** or **Matches Any** of the perspectives you select. If you choose **Include Sub-perspectives** you can extend your search to perspectives beneath the perspectives you have chosen.

7. Optionally, restrict your search to specific attributes of pages and items. For example, if you know that the item you want to find contains the word `aerobics` in its title, or that it was added some time after `10-OCT-04`, you can search for those particular attributes.
 - a. Click **Choose Attributes** to specify additional attribute search criteria.

Move all the attributes you require for the search to the **Selected** list, choose the order in which they are displayed, and then click **OK**. All those you select are displayed on the search form.
 - b. For each attribute, choose the appropriate search operator; for example **Contains All**, **Equals**, **Greater than**.

If Oracle Text is enabled some additional search operators are available. See also [Table 2-1, "Search Operators"](#).
 - c. For each attribute, enter the words that you want to search for, for example `aerobics` or `10-OCT-04`. You can also enter expressions in this field, including `#USER#` (for the current user) and `#TODAY#` (for today's date).
8. Click **Search**.

2.2.2 Interpreting Search Results

The Search Results Page can display items, pages, categories, or perspectives that meet your search criteria. It will not display:

- Content that you are not authorized to view
- Content that has expired, or is not yet published
- Page content that is derived from a template
- Portlet instances or Portal Smart Links
- Multiple versions of an item. When versioning is enabled, only the current version of items are returned in search results.

Note: New or recently modified portal content will not be returned in search results until the changes are reflected in the Oracle Text search indexes. If your portal is installed in Oracle Database 10g, Oracle Text indexes can be set up to synchronize immediately after portal content is added, updated, or deleted. Contact your portal administrator to learn more about the synchronization schedule for Oracle Text indexes in your portal. For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

[Figure 2-4](#) shows how search results are displayed.

Figure 2–4 Example of Search Results Page

- **Items:** Click the Items tab to display a list of the items that meet your search criteria. Click the item display name to display the item itself.
- **Pages:** Click the Pages tab to display a list of the pages that meet your search criteria. Click a page name to display that page.
- **Categories:** Click the Categories tab to display a list of the categories that meet your search criteria. Click a category display name to list the items associated with that category.
- **Perspectives:** Click the Perspectives tab to display a list of the perspectives that meet your search criteria. Click a perspective display name to list the items associated with that perspective.

If the search criteria includes a specific category or perspective, you can ignore the results on the Categories and Perspectives tabs. When you search by category or perspective, only the **Items** and **Pages** tabs display valid results.

Bulk Action Link

If you are searching in a single page group, a *Bulk Action* link may be displayed to allow you to perform actions on multiple search results simultaneously. This link is not displayed for searches on the Shared Objects page group. The Bulk Action link is a configurable option on search results pages, it is not displayed by default. For more information on displaying the Bulk Action link, for Custom Search portlets only, see [Section 16.3.3, "The Custom Search Form."](#)

Search Result Information

[Figure 2–5](#) shows the *default* information that is displayed alongside item links returned in search results.

The page designer determines which attributes are displayed with each search result and whether the attributes display links, see [Section 16.3.4.3, "Customizing Search Results."](#) The default attributes include the object's Create Date, its page group, and its classification category and perspective(s). If you click a link but you do not have the required access privileges then access to the object will be denied.

Figure 2–5 Search Result Information

To display the item, click the Display Name. To display information about the item, click the property sheet icon.

Figure 2–6 Property Sheet Icon



Oracle Text

When Oracle Text is enabled, additional icons may be displayed with your search results.

- Your page designer determines which icons are displayed, see [Section 10.2.9, "Changing the Attributes Displayed in a Region."](#)
- Your portal administrator determines whether gists and themes are generated for search results. For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

Figure 2–7 Oracle Text Search Result Icons



Click to display an HTML version of any file item.



Click to display an HTML version of any file item with the search words highlighted.



Click to display an item summary generated by Oracle Text, also called the item's gists.



Click to display the nouns and verbs appearing most often within the item, also called the item's themes.

<Score value>%

Displays the Oracle Text relevancy score, rating how well each result matches the search word (or any other textual search criteria), for example, 70%. The score is high when terms are found in the title. If there are multiple terms in the title, the result ranks even higher. Weighting is also given when multiple terms are found close together, or when search results contain the most matches.

Date/numerical search criteria is not included in the Score calculation, so results that only match date/numerical search criteria, do not display a score value.

2.2.3 Saving and Reusing Searches

When you save a search, you save all the search criteria under a single name. This enables you to repeat the search at a later time by clicking a link in the Saved Searches portlet, rather than re-entering the criteria manually.

Saved searches are displayed in the Saved Searches portlet shown in [Figure 2–8](#).

Figure 2–8 *Saved Searches Portlet*



If you cannot see the Saved Searches portlet and you have the appropriate privileges, add the portlet to a page. See [Section 2.3.1, "Adding a Portlet to a Page."](#) If you do not have the privileges to add the portlet to a page, ask your page designer to add it for you.

You *must* be logged in to Oracle Portal to save a search and see the Saved Searches portlet.

2.2.3.1 Saving a Search

To save search criteria:

1. Perform your search.
2. On the search results page, click the **Save Search** link.
Save Search is the default text for this link. If the Custom Search portlet on the search results page has been customized, the link text may be different, or may not be displayed at all. See also [Section 16.3.4.3, "Customizing Search Results."](#) If you are not logged in, you *will not* see the Save Search link.
3. In the **Display Name** field, enter a name under which to save the search criteria.
4. Click **OK**.

The name assigned to this search is displayed in the Saved Searches portlet. To re-submit a saved search, click the name entered here. Do not enter a display name that just contains blank spaces as no link text will be displayed.

2.2.3.2 Adding a List of Saved Searches to a Page

If you save one or more searches, you can access them from your home page, or from any page, as long as you have the privilege to add the Saved Searches portlet to that page.

To add a list of saved searches to a page:

1. At the top of the page, click **Personalize**.
2. In the region where you want to display saved searches, click the **Add Portlet** icon.
3. Click **Portal Content Tools** in the Portlet Repository.
4. Click **Saved Searches**.

Saved Searches is now included in the **Selected Portlets** list.

5. Click **Close** to return to the page.
6. Click **OK**.
7. In the Saved Searches portlet header, click **Personalize**.

8. Change the name of the portlet, if desired, in the **Display Name** field and set other options if required.
9. Click **OK**.

2.2.3.3 Reusing a Saved Search

When you save a search, you save all the search criteria under a single name. This enables you to repeat the search quickly, by choosing the saved search name rather than re-entering the criteria manually.

You must be logged in to Oracle Portal to reuse a saved search.

In the Saved Searches portlet, a list of saved searches is displayed. To reuse a saved search:

- Click the name of the search you want to perform.
If you cannot see the Saved Searches portlet, add it to a page. If you do not have the privileges to add the Saved Searches portlet to a page, ask your page designer to add it for you.

2.3 Personalizing Pages

When you personalize a page, you make changes to a page that are visible only to you. This section describes the personalize options that are available and [Table 2-3](#) outlines the privileges required to perform these page personalizations:

- [Section 2.3.1, "Adding a Portlet to a Page"](#)
- [Section 2.3.2, "Rearranging Portlets in a Page Region"](#)
- [Section 2.3.3, "Moving Portlets to Different Regions/Tabs"](#)
- [Section 2.3.4, "Hiding a Portlet on a Page"](#)
- [Section 2.3.5, "Removing a Portlet from a Page"](#)
- [Section 2.3.6, "Rearranging the Order of Tabs in a Region"](#)
- [Section 2.3.7, "Hiding a Tab on a Page"](#)
- [Section 2.3.8, "Applying a New Style to a Page"](#)
- [Section 2.3.9, "Personalizing a Page Parameter"](#)
- [Section 2.3.10, "Removing Your Page Personalizations"](#)

Note that you cannot personalize the items on a page.

Table 2–3 Personalize Page Privileges

Privilege	Description
Personalize Portlets (Full)	<p>If you have the <i>Full Personalize Portlets</i> privilege you can change the style of the page, add portlets to the page, and delete, move, hide, or show any portlet on the page.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ These changes are visible only to you. For example, if you delete a portlet from a page, other users will still be able to see that portlet on the page. Likewise, if you add a portlet to a page, other users will not see it. ■ To change the style of a page, the page group option Allow Privileged Users To Personalize Page Style must be set. See Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page."
Personalize Portlets (Add-Only)	<p>If you have the <i>Add-Only Personalize Portlets</i> privilege you can change the style of the page, add portlets to the page, and remove, hide, or show the portlets that are added.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ These changes are visible only to you. For example, if you add a portlet to a page, other users will not see it. ■ To change the style of a page, the page group option Allow Privileged Users To Personalize Page Style must be set. See Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page."
Personalize Portlets (Hide-Show)	<p>If you have the <i>Hide-Show Personalize Portlets</i> privilege you can change the style of the page, and hide, show, or rearrange any portlet on the page.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ These changes are visible only to you. For example, if you hide a portlet on a page, other users will still see it. ■ To change the style of a page, the page group option Allow Privileged Users To Personalize Page Style must be set. See Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page."
Personalize (Style)	<p>A user with the <i>Personalize Style</i> privilege can apply a different style to the page.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ These changes are visible only to the user who made them. For example, if a user with the <i>Personalize Style</i> privilege applies a different style to a page, other users will still see the page with the fonts and colors of the original style. ■ For a user with this privilege to change the style of a page, the Allow Privileged Users To Personalize Page Style option must be selected at the page group level. When this option is selected, users with this privilege on a page can apply a different style when personalizing the page. ■ If a page is based on a template, users with this privilege may not be able to control the style of the page. The template level option, Enable Pages To Use Different Style, controls whether page designers can specify different style settings for the page. This option must be selected, otherwise, the page's style settings cannot be changed by users with this privilege. See Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page." ■ This privilege is not available for mobile pages.

Table 2–3 (Cont.) Personalize Page Privileges

Privilege	Description
View	A user with the <i>View</i> privilege can view the content of the page, but cannot add, remove, show, or hide any of that content.

2.3.1 Adding a Portlet to a Page

You can add portlets to your version of the page. Each region on a page may contain one or more portlets.

To add a portlet to a page:

1. Navigate to the page on which you want to add a portlet.
2. Click **Personalize**.
3. Click the **Add Portlet** icon in the region in which you want to add a portlet.

Note: If the region already includes items, the **Add Portlets** icon is not available as you cannot add portlets to an item region.

4. In the Portlet Repository, locate the portlet that you want to add. If you know the name of the portlet, enter it in the **Search** field and click **Go**.

Oracle Portal provides a number of built-in portlets for you to use. See [Section A.5, "Built-in Portlets."](#) If you have the appropriate privileges to access a portlet, it is displayed.

5. (Optional) To check what a portlet looks like before adding it to your page, click the **Preview** icon next to the name of the portlet. The Preview feature is not available for all portlets.
6. To add a portlet to your page, click the portlet name. Multiple selections are not possible.

The order of the portlets in **Selected Portlets** reflects the order in which they appear on the page. To change the order of the portlets, highlight the portlet name and use the arrows to specify the new order.

7. Click **OK**.

2.3.2 Rearranging Portlets in a Page Region

You can change the order in which portlets are displayed in a page region.

To rearrange portlets:

1. Navigate to the page that includes the portlet.
2. Click **Personalize** to switch to personalize mode.
3. In the region that contains the portlets that you want to rearrange, click the **Arrange Portlets** icon.
4. In the **Arrange Portlets** list, select a portlet and use the arrows to reorder it in relation to the other portlets in the list. Repeat this step for other portlets that you want to rearrange.
5. Click **OK**.

6. Click **Close** to display your personalized page.

2.3.3 Moving Portlets to Different Regions/Tabs

You can move portlets to another region or tab on the same page.

To move a portlet:

1. Navigate to the page that includes the portlet.
2. Click **Personalize** to switch to personalize mode.
3. Select the checkbox for the portlet you wish to move.

Note: You can move several portlets to another region in a single operation by selecting the check boxes next to the portlets that you want to move.

4. Click **Move**.
5. Select a region for the portlet to move to. You can choose a region on a different tab.
6. Click **Move Portlet**.

2.3.4 Hiding a Portlet on a Page

If your page contains a portlet that you are not currently interested in viewing, you can hide it. If you need the portlet at a later date, you can restore it. This feature is useful if you do not have the appropriate privileges to delete portlets.

To hide a portlet:

1. Navigate to the page that includes the portlet.
2. Click **Personalize** to switch to personalize mode.
3. Select the checkbox for all the portlets you wish to hide.
4. Click **Hide**.

Note that the selected portlets are now greyed. To show a hidden portlet in the future, select the portlet and click **Show**.

5. Click **Close** to display your personalized page.

2.3.5 Removing a Portlet from a Page

You can delete a portlet from your view of a page. The actual portlet is not deleted from the Portlet Repository, so you can add the portlet back later if you wish.

If you think that you may need the portlet in the future, consider hiding the portlet instead.

To delete a portlet:

1. Navigate to the page that includes the portlet.
2. Click **Personalize** to switch to personalize mode.
3. Select the checkbox for the portlet you wish to delete.
4. Click **Delete**.

5. Click **Yes** to confirm and then **Close** to display your personalized page.

2.3.6 Rearranging the Order of Tabs in a Region

To change the order of tabs in a region:

1. Navigate to the page that includes the tabs.
2. Click **Personalize** to switch to personalize mode.
3. Click the **Arrange Tabs** icon in the relevant region.
4. In the **Arrange Tabs** list, select a tab and use the arrows to change the tab order.
5. Repeat step 4 to rearrange another tab.
6. Click **OK**.
7. Click **Close** to display your personalized page.

2.3.7 Hiding a Tab on a Page

To hide a tab on a page:

1. Navigate to the page that includes the tabs.
2. Click **Personalize** to switch to personalize mode.
3. Select the checkbox for all the tabs you wish to hide.
4. Click **Hide**.

Note that the selected tabs are now greyed. To show a hidden tab in the future, select the tab and click **Show**.

5. Click **Close** to display your personalized page.

2.3.8 Applying a New Style to a Page

The style you apply to a page governs the colors and fonts used by the page and all the tabs, portlets, and items displayed within it. If you want to use different colors and fonts, you can apply a different style to the page.

You cannot apply a different style to the page:

- If the page is based on a template and that template does not allow pages to use a different style.
- If your page group administrator has disabled the setting **Allow Privileged Users to Personalize Page Style**.

To apply a new style to a page:

1. Navigate to the page that requires style changes.
2. Click **Personalize** to switch to personalize mode.
3. Click the **Style** tab.
4. The **Current Style** field shows which style is currently applied to the page. The Preview section includes a preview of the current style's settings. To apply a different style to the page, choose the style you want to use in the **Choose Style** list. When you choose a new style, the preview is refreshed to show this style's settings.

The **Choose Style** list includes all the public styles in this page group and the Shared Objects page group, as well as any styles that you have created in this page group for your own use. The **<Use User's Default Style>** option sets the page style to whatever style you specified as your default. See [Section 2.1.6, "Choosing a Default Page Style."](#)

5. In the Preview section, click each of the radio buttons to check that colors and fonts used in the style meet your requirements.
6. Click **OK**.

2.3.9 Personalizing a Page Parameter

Page parameters are used to pass values to a page. If personalizable parameters are defined for a page, you can change the information displayed on the page to suit your needs. For example, if a page has a Ticker parameter and it displays several stock-related portlets that have parameters for Ticker, you can personalize the page to display different stock information by changing the stock Ticker parameter.

To personalize a page parameter:

1. Display the appropriate page.
2. Click **Personalize** to switch to personalize mode.
3. Click the **Parameters** tab (available only if the page has personalizable page parameters).

For more information, see [Section 22.3, "Adding a Parameter to a Page or Portal Template."](#)

4. In the **Value** field, enter the value you want to use for a parameter.

Changing the value of a parameter may change the information displayed in portlets on the page.

5. Click **OK** to return to the page.

2.3.10 Removing Your Page Personalizations

To remove page personalizations:

1. Display the appropriate page.
2. Click **Personalize** to switch to personalize mode.
3. Do one of the following:
 - Click **Remove My Page Personalizations** to restore the page to its original settings. For example, this removes any portlets or tabs added to the page. It also restores any portlet or tab that was deleted. All personalizations are removed, no matter how long ago they were made.
 - Click **Remove My Tab Personalizations** to remove any changes made to the currently active tab. For example, this removes any portlets or sub-tabs that were added to the tab through user personalization. (Base portlets, those that were included on the tab prior to personalization, are restored, if they were moved from the tab.) All personalizations are removed, no matter how long ago they were made.

These options do not remove personalizations made to portlet instances.

Note: If you cannot perform actions on certain areas (or regions) of the page, the **Enable Users To Include Content In This Region** option for the region may not be selected. Contact your page designer for more information. See also [Section 10.2, "Configuring Region Display Options."](#)

2.4 Subscribing to a Page or Item

If your page contains a *Subscribe* link and you subscribe to the page, you are notified whenever that page is updated, new items are added to the page, and existing items are updated. Similarly, if Subscribe icons are displayed next to items on a page, you can be notified whenever the items are updated.

To subscribe to pages or items you must be logged in to Oracle Portal. To view information about subscribed pages or items you must have access to a page containing the *My Notifications* portlet.

This section provides the following information:

- [Section 2.4.1, "Subscribing to a Page"](#)
- [Section 2.4.2, "Subscribing to an Item"](#)
- [Section 2.4.3, "Setting Up the My Notifications Portlet to Show Your Subscriptions"](#)

For more information on approvals and notifications, see [Section 20.1, "Setting Up an Approval Process for a Page."](#)

2.4.1 Subscribing to a Page

To subscribe to a page:

1. Navigate to the page to which you want to subscribe.
2. Click the **Subscribe** link.

Now you will be notified whenever the page is updated. You can check for notifications using the My Notifications portlet. Subscribing to a page automatically subscribes you to every item on that page.

The default label for the **Subscribe** link is Subscribe; however, the page designer may have given it a different label, or decided to use an icon instead. If you are not sure what to click to subscribe to the page, contact the page designer.

2.4.2 Subscribing to an Item

To subscribe to an item:

1. Navigate to the page containing the items to which you want to subscribe.
2. Click the **Subscribe** icon next to the item.

Now you will be notified whenever the item is updated.

Subscribe icons are displayed if they have been added to the page region. If no Subscribe icons are available, contact the page designer.

2.4.3 Setting Up the My Notifications Portlet to Show Your Subscriptions

If you have the appropriate privileges, you can personalize the My Notifications portlet to display information about items and pages to which you subscribe.

Figure 2–9 My Notification Portlet Example

My Notifications					
Type	Subject	Page	Status	Submitter	Date
	HR spreadsheet	Home	Pending	SMITH	15-AUG-2004 11:41 AM
	meeting notes	Home	Pending	SMITH	15-AUG-2004 11:05 AM
	corporate URL	Home	Pending	SMITH	13-AUG-2004 02:28 PM
	field newsletter	Home	Pending	SMITH	13-AUG-2004 07:22 AM
	sales data	Sales	About to Expire	JONES	17-AUG-2004 12:00 PM
	marketing report	Sales	About to Expire	JONES	17-AUG-2004 08:52 AM
	(Subscribe)	Home	New Item	SMITH	15-AUG-2004 08:55 AM
	www	Home	Item Expired	SMITH	15-AUG-2004 08:54 AM
	home page graphic	Home	New Item	SMITH	15-AUG-2004 08:52 AM

If the notification item subject includes parentheses, such as (*Account Info*), the item is a Portal Smart Link.

To personalize the My Notifications Portlet:

1. In the My Notifications portlet header, click **Personalize**.
2. In the **Display Name** field, enter the name that you want to appear in the portlet header. The default is *My Notifications*.
3. Choose whether to **Show All Notification Items** in the portlet, or to **Limit the List** to a specified number of notifications. The default is *10*.

There is no maximum limit, but you may start to experience performance issues if the number of notifications displayed in your portlet is too large.

4. Choose **Show Subscription Notifications**.

The My Notifications portlet shown in [Figure 2–9](#) is set up to show all three types of notifications: Subscription, Expiry, and Approval.

5. Select whether to **Display Notification Type Icons** for notifications listed in the portlet.

When the My Notifications portlet is set up to show more than one type of notification (Subscription, Expiry, Approval), the Type icons can help you distinguish between these different types.

6. Select whether to **Display Notification Status** for notifications listed in the portlet. The subscription status values include:

Table 2–4 Subscription Notification Status Values

Status	Description
Item Deleted	An item to which you subscribe was deleted.
Item Expired	An item to which you subscribe has expired.
Item Updated	An item to which you subscribed was updated. Note that updates include actual changes to items (for example, additional text added to a file), and also changes in item versioning. If you set an item to be the current version, this is considered an item update for subscriptions.
New Item	A new item was added to a page to which you subscribe.
New Page	A new sub-page was added to a page to which you subscribe. Note that notifications are not sent for updates to a sub-page.
New Portlet	A new portlet was added to a page to which you subscribe.

Table 2–4 (Cont.) Subscription Notification Status Values

Status	Description
New Tab	A new tab was added to a page to which you subscribe.
New Version	An item to which you subscribe has a new version.

A subscription notification always links to the current version of the item.

- If you update an existing item, or set an existing version to be the current version, the notification status is *Item Updated*.
- If you add an item as a new version and as the current version, the notification status is *New Version*.
- If you add an item as a new version, but not the current version, and you update it, a subscription notification is not issued.

7. Click **Apply**.
8. Choose whether to display subscription notification items from **All Page Groups** in the portal, or a specific set of page group(s). Click the **Browse Page Groups** icon to select a page group.
9. Specify a time limit for the subscriptions displayed in the portlet. The default setting is *24 hours*.

Subscriptions older than the specified time limit are not displayed.

10. Specify a cache time period. The default is *60 minutes*.

This setting determines how frequently subscriptions in the cache are updated. If portal content changes frequently and real time updates are critical, choose a low value, for example, 10 minutes. If portal content is fairly static a longer cache time may be sufficient, for example, if you specify 360 minutes, the cache is updated once every 360 minutes.

In addition, the cache is refreshed automatically for certain events, such as when you subscribe to an object.

11. Click **OK**.

2.5 Accessing Oracle Portal Page Editing Tools

If you are logged in to Oracle Portal and have at least *Manage Content* privileges on a page, you can display the page in Edit mode by clicking the **Edit** link at the top of the page. In Edit mode you can set page properties and add, modify, or delete portlets and items on the page. Whilst editing a page, the toolbar, shown in [Figure 2–10](#), is displayed at the top of the page.

Figure 2–10 Edit Mode Toolbar



In Edit mode, the changes you make to page content are visible to all users. If you want your changes to be visible to yourself only, personalize the page instead. See [Section 2.3, "Personalizing Pages."](#)

There are several different editing modes in Oracle Portal: Graphical, Layout, List, Pending Items Preview, and Mobile Preview. To edit your page in a particular mode, click the appropriate link in the toolbar:

- **Graphical** - Displays page and items as they appear on the finished page. You can also add and delete regions in this mode.
- **Layout** - Displays regions without showing the actual content displayed on the page. In this mode, you can add, arrange, and remove regions on the page. You can also hide, show, delete, or move content.
- **List** - Lists all the objects that appear on the page, as well as each object's size, type, date last updated, and so on. Use this mode to approve or reject, expire, unexpire, show, hide, check out, or check in content, submit drafts for approval, grant access to sub-pages, or make sub-pages public or private. In this mode you can also perform actions on several objects at once, move or copy objects to other pages, and purge deleted or expired items.
- **Pending Items Preview** - Lists items that are awaiting approval. In this mode you can preview all your pending items, and approvers can view, approve, or reject pending items. In this mode you can also see your draft, hidden, deleted, and expired items.
- **Mobile Preview** - Shows how pages will look on a mobile device.

Your page group administrator determines which editing modes are available to you, when setting up the page group. See [Section 4.4, "Configuring a Page Group's Page Edit Modes."](#)

This section describes:

- [Section 2.5.1, "Accessing Page Editing Tools"](#)
- [Section 2.5.2, "Accessing Page Portlet Editing Tools"](#)

2.5.1 Accessing Page Editing Tools

To display a page in Edit mode:

1. Navigate to the page.

Note: If you do not see the page that you want to work with, you may not have the appropriate page access privileges. See your page group administrator to gain access.

2. Click **Edit** to switch to Edit mode.

Edit is the default name for this link. Your page designer may have given this a different name.

3. Do any of the following:
 - To change to a different editing mode, click an **Editing Views** link (Graphical, Layout, or List).
 - To see how the page will look on a mobile device, click Mobile: **Preview**.
 - To review your draft items, or items awaiting approval, click Pending Items: **Preview**.

If this link is not available, **Approvals and Notifications** are not enabled for the page group. See [Section 5.4, "Setting Up Approvals."](#)

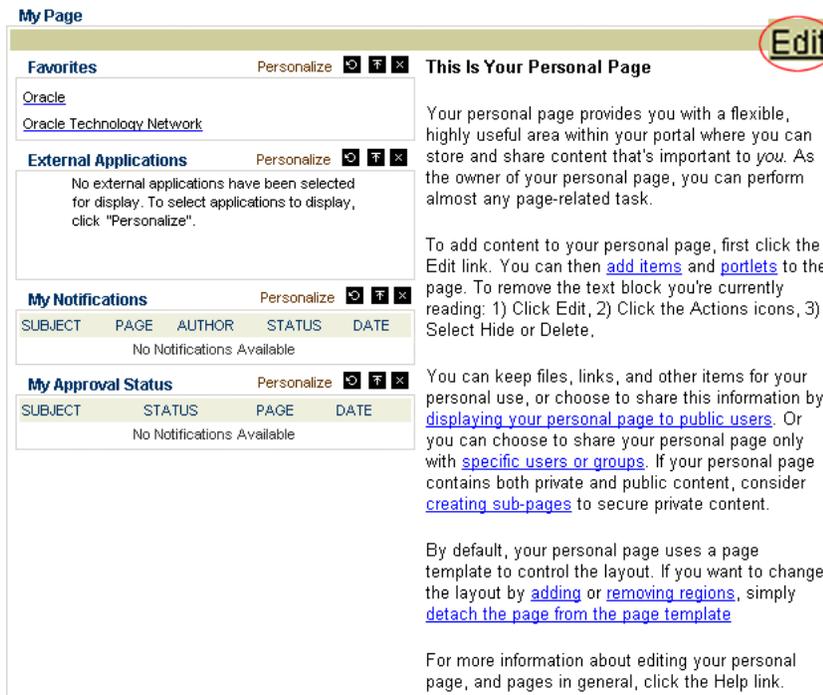
Contact your page group administrator, if the editing mode you want to work with is not available. Your page group administrator determines which edit modes are available using **Edit Mode** settings on the Configure tab of page group properties. See [Section 4.4, "Configuring a Page Group's Page Edit Modes."](#)

Note: When you switch between the various edit modes, the current state of any portlets on the page is not maintained.

2.5.2 Accessing Page Portlet Editing Tools

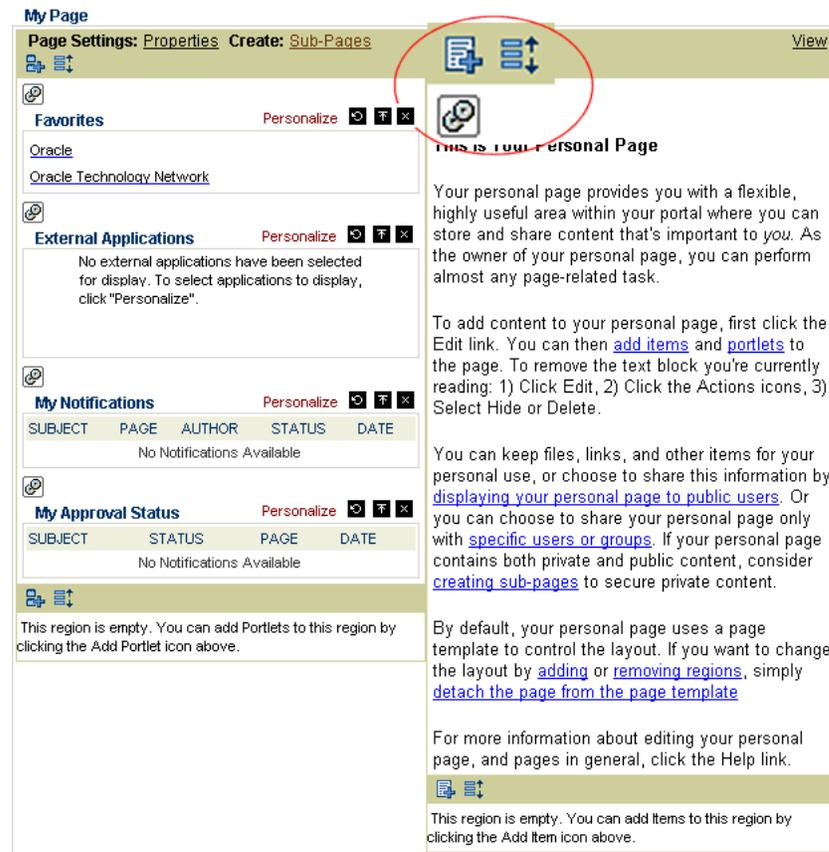
You may find that page content is exposed to you through *page portlets*. In this case, it may still be possible to edit the content by switching to Edit mode within the portlet itself. If you have this capability, you will see an Edit link in the portlet header as shown in [Figure 2-11](#).

Figure 2-11 The Edit Link in a Page Portlet



To switch to Edit mode, simply click the **Edit** link. Although the complete range of editing tools is not available in the page portlet Edit mode, all the tools necessary for publishing content are accessible in this mode (see [Figure 2-12](#)).

Figure 2–12 A Page Portlet in Edit Mode



The Page portlet offers a simplified Edit mode that may be more suitable for some content contributors than the full page Edit mode. The Edit Defaults mode of the Page portlet (see [Figure 2–13](#)) allows the page designer to select which regions are displayed in the Page portlet, and to hide or show the Edit link. This allows the page designer to select a subset of regions (containing content that needs to be published) while hiding regions (such as navigation bars, banners and other page decoration) that typically are not relevant when the page is published as a portlet.

The Pending Items Preview edit mode is not available for Page portlets, so it is not possible to see *pending* items on a page when it is viewed through a Page portlet. If you need to track the progress of pending items, place the *My Approval Status* portlet on the same page as the Page portlet. All the items that are not otherwise visible in the Page portlet are visible in the My Approval Status portlet until they are approved or published.

Figure 2–13 Page Portlet Edit Defaults Page

Page Portlet Settings

Choose the page, the contents of which you want to render within the portlet. Then use the Page Regions check boxes to select one or more regions to display in the portlet. The selections you make will be visible to everyone who sees this page and has not personalized the portlet.

Display Name:

Page Path: PAGE/PORTLETREPOSITORY/

Page: 

Page Regions:

- Display All Regions
- Display Selected Regions

-
- Page Title
- Page Path
- Sub-Pages
- Spacer
- Portlets

Display Edit Link

Note: The **Edit** link appears only to users who are authorized to edit content on the page portlet (users who have the *Manage Items With Approval* privilege or higher on the page that is published as a portlet).

2.6 Adding Content to a Page

In Oracle Portal, you add content to a page by adding items. For example, to add:

- Files (such as documents), you add items with a file-based item type.
- Links to another Web page, Web site, or Oracle Portal page, you add items with a URL-based item type.
- Text or embedded HTML to a page, you add items with a text-based item type.

There are other types of items that can be added to a page. Your page group administrator determines which item types are available to you, when setting up the page group. See [Section 5.2.2.3, "Making an Item Type Available to a Page Group."](#)

Oracle Portal provides many item-related features which support document collaboration among different users and groups. The main item features include the following:

- **Versioning** - When item versioning is enabled, previous versions of an item are retained instead of being overwritten when the item is edited. This means that you can have a record of all the changes made to an item and can revert to a previous version if necessary. See [Section 14.12, "Using Item Version Control."](#)

- **Item level security** - Item level security enables you to choose the specific users or groups that are able to manage the item. See [Section 17.9, "Securing Items."](#)
- **Document control** - With document control, groups of users can edit items using a check in and check out process. This feature restricts a user from editing the item while it is being edited or checked out by another user. See [Section 14.5, "Checking Items Out and In."](#)
- **Publishing dates** - When an item includes the Publish Date attribute, you can add the item to a page any time, yet display it to other users (in View mode) on a specified date in the future. See [Section 14.4.3, "Setting a Publish Date for an Item."](#)
- **Expiry dates** - When an item includes the Expiration Period attribute, you can specify how long the item is displayed on a page. See [Section 14.11, "Expiring Items."](#)
- **Approvals** - The *Manage Items With Approval* page privilege and the page/page group option *Require Approval for All Users* enable you to add items that must first be approved before they are displayed to other users in View mode. See [Section 2.7, "Getting Your Content Approved"](#) and, for more advanced information, [Chapter 20, "Setting Up an Approval Chain."](#)

2.6.1 Adding Content

Oracle Portal makes it easy to work with items on pages, once the appropriate privileges are established. You can use step-by-step wizards to add, edit, and delete items from your pages, or, if you have a WebDAV client such as Web Folders available, you can seamlessly drag and drop files and folders back and forth between your desktop and Oracle Portal pages. See [Chapter 14, "Working with Items."](#)

2.6.1.1 Adding Items with a Wizard

To find out how to use step-by-step wizards to add content to Oracle Portal, see [Section 14.2, "Adding Items to a Page."](#) A file is a type of item; so is a block of HTML code, a link to another page, a zip file, and so on.

2.6.1.2 Adding Items from Your Desktop

Oracle Portal supports the use of a Web-based Distributed Authoring and Versioning protocol (WebDAV). Using WebDAV clients, such as Oracle Drive or Web Folders, you can seamlessly drag and drop content, files, and folders back and forth between the desktop and Oracle Portal. You can also perform in-place opening, editing, and saving of file-type items using desktop applications, such as Microsoft Office and Macromedia Dreamweaver.

To learn more about WebDAV and how to add content to Oracle Portal using some popular WebDAV clients, see [Chapter 18, "Using WebDAV Clients with Oracle Portal."](#)

2.6.2 Performing Actions on Items

Once you have added content to Oracle Portal, the items are easy to manage and maintain. You can copy, move, rearrange, and delete items, restore deleted items, or hide items.

You can also set attributes for your items. For example, it is important to classify the content of items as this will help other users to find your content and allow them to determine whether items are of interest. You can also control when people see an item by specifying its publish date, or you can set expiration dates for items so they are hidden when they are no longer relevant or important. For more information on the

actions you can perform on items, see [Chapter 14, "Working with Items"](#) and [Chapter 15, "Working with Portlets."](#)

2.7 Getting Your Content Approved

If you have the page privilege *Manage Items with Approval* (or the option *Require Approval for All Users* is set at the page or page group level) any changes and additions that you make to Oracle Portal content must be approved by one or more people before the modifications become visible to others. To help you keep track of content waiting approval, you'll want to have the My Approval Status portlet on one of your frequently used pages so you can quickly see whether your content has been approved.

It is possible to upload draft content to the portal without having to wait for approval. Drafts are not displayed to other users viewing the page. You can continue to work on drafts until they are finalized and ready for approval. See [Section 2.7.1.1.3, "Submitting a Draft Item for Approval."](#) To use the draft feature, approvals must be enabled for your page group. You'll find information on how to do this in [Section 5.4, "Setting Up Approvals."](#)

If you want to find out whether there are items pending approval on a particular page, you can view the page in Pending Items Preview mode. In this mode, items not yet approved show the status *Pending* or *Update Pending*. You can also resubmit or delete rejected items and view draft items from here. For more information, see [Section 2.7.1.1, "Using the Pending Items Preview Mode."](#)

If you are part of an approval chain, use the My Notifications portlet and the My Worklist portlet to check whether something requires your approval. You may respond by approving or rejecting the item in question.

This section contains the following sub-sections:

- [Section 2.7.1, "Submitting Content for Approval"](#)
- [Section 2.7.2, "Approving or Rejecting Content"](#)

2.7.1 Submitting Content for Approval

Oracle Portal includes a special page privilege *Manage Items with Approval*. If you have this privilege on a page (or the option *Require Approval for All Users* is set for the page/page group) you can add items to the page but the items do not become visible to other users until they have been approved. The users responsible for approving the items are specified in the page or page group's approval process. See [Chapter 20, "Setting Up an Approval Chain"](#) for more information.

For example, if all product whitepapers must be reviewed by your legal department before they are published you may have an approval process set up that includes the legal department as one of the required approvers.

2.7.1.1 Using the Pending Items Preview Mode

Use the Pending Items Preview mode to preview your items that are pending approval directly on the page.

Note: Pending Items Preview mode is not available for Page portlets. See [Section 2.5.2, "Accessing Page Portlet Editing Tools."](#)

Figure 2–14 The Pending Items Preview Mode Link

To access this mode, click Pending Items: **Preview** when editing a page. If this option is not available, *Approvals and Notifications* are not enabled for the page group. See [Section 5.4, "Setting Up Approvals."](#)

In Pending Items Preview mode:

- New items are displayed with the status *Pending*.
- Updated items are displayed with the status *Update Pending*. This mode displays the updated item, whereas other editing modes display the existing item.
- Draft items are displayed with the status *Draft*. Draft items are visible to the item owner only.
- Hidden, deleted, and expired items are displayed along with an indicator of their current status. The Edit Defaults and Actions icons display next to hidden and expired items, enabling you to show and unexpire such items in this view.

Items with the status Pending, Update Pending, or Draft, are not displayed in Graphical or Layout mode because these modes do not display pending items.

2.7.1.1.1 Resubmitting Rejected Items If your item is rejected, you can edit the item and then resubmit it for approval. Click the Edit icon next to the rejected item to make your changes. After you edit the item, it is resubmitted for approval.

2.7.1.1.2 Deleting and Un-deleting Rejected Items You can delete rejected items if you wish. To do this, click the Actions icon next to the item and click **Delete**.

Additionally, you can un-delete a rejected item that was deleted by clicking the Actions icon next to the item and then **Undelete**. If you do this, the item returns to a rejected status.

2.7.1.1.3 Submitting a Draft Item for Approval In Pending Items Preview mode, draft items are visible to the item owner only. Once a draft is finalized, you can submit the item for approval and once approved it becomes visible to other users. To submit a draft item for approval, click the **Actions** icon next to the item and click **Submit for Approval**.

If item versioning is enabled (Simple or Audit) you must choose the version control option appropriate for your item: Add Item As New version, but not as Current Version, Add Item As New and Current Version, Overwrite Current Version (Simple only). For more information, see [Section 5.5.2, "Setting the Item Versioning Level for a Page Group."](#)

2.7.1.1.4 Deleting a Draft Item You may delete a draft item if you are the item owner. Note that when you delete a draft item, it is irrevocably deleted from the portal; there is no **Undelete** option. The only way to restore the item is to add it to the page once again. To delete a draft item in Pending Items Preview mode, click the **Actions** icon next to the item and click **Delete**.

2.7.1.1.5 Submitting Versioned Items for Approval You can edit an earlier version of an item and submit it for approval. The older version, rather than the current version, is overwritten.

2.7.1.2 Personalizing the My Approval Status Portlet

You can track the progress of items requiring approval using the Approval Status portlet. In the portlet, click the subject to view the item, click the status to view the approval history, and click the page name to view the page that includes the item.

Figure 2–15 The My Approval Status Portlet

Subject	Page	Status	Approver	Date
Marketing report for September	Home	Pending	JONES	30-NOV-2004
Marketing report for August	Home	Rejected	JONES	30-AUG-2004
Marketing report for July	Home	Approved	JONES	30-JUL -2004

If you have the appropriate privileges on the page, you can personalize the title of the My Approval Status portlet and the way status information is displayed. To do this, click the **Personalize** link and set the options as required.

2.7.2 Approving or Rejecting Content

After a user adds or modifies an item, the approvers identified in the approval process are sent an approval notification. An approver may respond to the notification by approving or rejecting the item in question.

Approval notifications are listed in one of two portlets:

- Notifications for approvals initiated by an Oracle Portal approval process are shown in the My Notifications portlet.
- Notifications for approvals initiated by an Oracle BPEL workflow process are shown in the My Worklist portlet.

2.7.2.1 Setting Up the My Notifications Portlet to Show the Status of Oracle Portal Approvals

You can personalize the My Notifications portlet to show the status of items pending approval through Oracle Portal approval processes.

Figure 2–16 The My Notifications Portlet

Type	Subject	Page	Status	Submitter	Date
	HR spreadsheet	Home	Pending	SMITH	15-AUG-2004 11:41 AM
	meeting notes	Home	Pending	SMITH	15-AUG-2004 11:05 AM
	corporate URL	Home	Pending	SMITH	13-AUG-2004 02:28 PM
	field newsletter	Home	Pending	SMITH	13-AUG-2004 07:22 AM
	sales data	Sales	About to Expire	JONES	17-AUG-2004 12:00 PM
	marketing report	Sales	About to Expire	JONES	17-AUG-2004 08:52 AM
	(Subscribe)	Home	New Item	SMITH	15-AUG-2004 08:55 AM
	www	Home	Item Expired	SMITH	15-AUG-2004 08:54 AM
	home page graphic	Home	New Item	SMITH	15-AUG-2004 08:52 AM

To personalize the My Notifications portlet:

1. Edit the page that contains the My Notifications portlet.

2. Click the **Personalize** link.
3. In the **Display Name** field, enter a different title for the portlet if required. For example, if the portlet will be used only to display approval notifications, you might change the display name to *Items Requiring My Approval*.
4. In the **Display Limit** radio group, select whether to display all notifications or limit the portlet to display only a specified number of notifications.
5. Make sure the **Show Approval Notifications** check box is selected.
The portlet can also display expiry and subscription notifications.
6. Select the **Display Notification Type Icon in Portlet** check box if you want to display an icon to illustrate whether the notification is an approval, expiry, or subscription notification. This is useful if you intend to use the portlet to display other types of notifications.
7. Select the **Display Notification Status in Portlet** check box if you want to display the status of the notification in the portlet. This is useful if you intend to use the portlet to display other types of notifications. For approval notifications there is only one status: Request Pending.
8. Click **OK**.

2.7.2.2 Approving or Rejecting an Item

When there is an item that requires your approval, you receive a notification in the My Notifications or My Worklist portlet. You must decide whether to approve or reject the item. If you approve the item, a notification is sent to the next approver in the approval process. If you are the final approver in the approval process, the item will be published to the portal after you approve it. You may instead decide to reject the item. If you reject the item, the approval process is halted even if there are remaining steps (approvers). After you approve or reject the item, the notification is removed from the portlet.

In the My Notifications and My Worklist portlets, the approver can click the subject title to display the approval page. From this page, the approver can view the item, enter comments, and decide whether to approve or reject the item. The approver can also view the approval history of the item.

The powers of approval and rejection for Oracle Portal approval processes are distributed as follows:

- You must be one of the current approvers, a page group administrator, or a page or content manager (with the *Manage* or *Manage Content* privilege on the page), to approve or reject an item.
- An approver can also approve (or reject) an item directly on its page using the Pending Items Preview mode. See [Section 2.7.1.1, "Using the Pending Items Preview Mode."](#)
- An approver can also update a pending item and directly make changes before approving the item. Only approvers who have *Manage Content* privilege or higher are able to update pending items. See [Section 2.7.1.1, "Using the Pending Items Preview Mode."](#)

If a translated item requires approval, it can be updated by an approver but to do so, the approver must be logged in to the portal with the same language as the translated item and have the necessary privileges.

- The portal administrator can approve or reject any pending item. On approval by the portal administrator, the process skips the current approver and moves onto

the next approver. On rejection, the approval process ends. This is a useful way of bypassing a user in an approval process who is unavailable.

- Page group administrators can approve or reject any pending item in their page groups from Pending Items Preview mode, or from the Pending Approvals Monitor portlet.
- Page or content managers (with the *Manage* or *Manage Content* privilege on the page) can approve or reject any pending item on their pages from Pending Items Preview mode, or from the Pending Approvals Monitor portlet.
- If you do not have the appropriate access privileges for the page that includes the item you approved or rejected, you are redirected to the Oracle Portal home page after you approve or reject the item.

Approving an Item

To approve an item:

1. In the My Notifications or My Worklist portlet, click the item's subject (see [Figure 2-16](#)) to access the Approval Notifications Detail page.
2. To review the item, click the **Item Link**.
3. Enter your approval comments and click **Approve**.

Rejecting an Item

To reject an item:

1. In the My Notifications or My Worklist portlet, click the item's subject (see [Figure 2-16](#)) to access the Approval Notifications Detail page.
2. To review the item, click the **Item Link**.
3. Enter your rejection comments, and click **Reject**.

What If an Item Is Rejected?

If you created the item that is rejected, the item appears in your My Approval Status portlet with the status *Rejected*. Also, when you view the page that includes the item in Pending Items Preview mode, you will see that the item was rejected. You, as the item creator, can edit the rejected item from the Pending Items Preview mode. After the item is edited, it is automatically resubmitted for approval. See [Section 2.7.1.1, "Using the Pending Items Preview Mode."](#)

A rejected item can be deleted by the item creator, the page group administrator, or a page or content manager (with the *Manage* or *Manage Content* privilege on the page). The item's status changes to *Deleted*. A rejected item that was deleted can be un-deleted, provided it hasn't been purged. When you un-delete (or restore) a rejected item, the item's status changes back to *Rejected*. Rejected items that are deleted will be purged when all other deleted items are purged in the page group.

All actions performed on the rejected item appear in the approval history for the item.

2.8 Troubleshooting

How can I be sure that I am seeing the most up to date content

Your browser's default settings are sufficient for displaying valid portal content. If those defaults have been altered, you should check that their values do not inadvertently disable valuable cache capabilities.

The Search page group selection box does not seem to be working properly. Some page groups are not displayed and some display incorrectly.

Do any of the page group names contain a comma? If the name of a page group contains one or more commas it does not display properly in search-related page group selection boxes. This is because the comma character is used as the delimiter between page group names. For example, a page group named `Sales, London, UK`, might appear as three, separate, selectable page group names instead of just a single page group. The extra, invalid page group entries get displayed instead of valid page groups and therefore you might also find that some page groups appear unavailable. Report your problem to the page group administrator. Page group administrators are advised not to use commas within page group names due to this issue.

If page group names are not the issue, you might find that the search portlet is set up to exclude certain page groups. Contact the page owner, to see if the page group restriction can be removed.

When I edit the page, the Pending Items Preview link does not display in the page toolbar.

When a tab that is on a public page has restricted access, such that users cannot add items to the tab without approval, the *Pending Items Preview* link does not display. This is because the page toolbar displays according to page settings and not tab settings. You can still get to preview mode:

- Edit the page, and change the mode setting in the portal page's URL to `_mode=25`.
- Access the page through the My Approval Status portlet.

I uploaded a draft item but cannot see it on my page. Pending, rejected, and deleted rejected items are not displayed either.

Drafts do not display as expected when the page that contains the draft item is cached at the system level. To avoid access problems, do not cache pages (or templates) at the system level when Approvals and Notifications are enabled. See [Section 21.1, "Page Caching."](#)

I cannot see my approval notifications.

There are two portlets for listing approval notifications:

- Notifications for approvals initiated by an Oracle Portal approval process are shown in the My Notifications portlet.
- Notifications for approvals initiated by an Oracle BPEL workflow process are shown in the My Worklist portlet.

If your portal uses a mixture of Oracle Portal and Oracle BPEL approval processes, make sure that you include and check both portlets for notifications.

Part II

Planning Your Portal

Part II contains the following chapters:

- [Chapter 3, "Planning Your Portal"](#)
- [Chapter 4, "Working with Page Groups"](#)
- [Chapter 5, "Preparing to Add Content"](#)

Planning Your Portal

If you are responsible for building a portal for others to populate with content, this chapter can help you. As the *page group administrator*, your job is to think about the portal as a whole and the needs of the community it will serve. Among other things, you must decide how many page groups your portal should comprise, how to approach portal development, and how to optimize a given page group for the purposes it will serve.

Note: Before you begin your work, make sure that the *portal administrator* has already completed all the necessary portal administration tasks, described in the Oracle Fusion Middleware Administrator's Guide for Oracle Portal. (If you're unfamiliar with either of these highlighted terms or what's meant by them, see [Section 3.1.2, "Knowing Your Audience"](#)).

To build an effective portal, it's important to arm yourself with knowledge and to do some careful planning *before* embarking upon the actual work of creating the portal. [Section 3.1, "Getting Up to Speed"](#) contains three sections to help you acquire the knowledge you need:

- [Section 3.1.1, "Approaching Your Portal"](#) discusses the ways in which people tend to tackle the portal-building process, and offers some recommendations to help you get off on the right foot.
- [Section 3.1.2, "Knowing Your Audience"](#) defines the different user groups typically found at most enterprises.
- [Section 3.1.3, "Key Concepts and Terms"](#) gives you an overview of the components comprising Oracle Portal. After reading this section, you'll be well positioned to take advantage of the wealth of features available to you in this product.

Once you've digested the information in [Section 3.1, "Getting Up to Speed"](#), you'll be ready to start tackling the job of creating the portal itself. You'll find that you can build your portal in less time, and achieve far more sophisticated results, if you take the time to study the information in [Section 3.2, "Making Key Decisions"](#), which contains:

- [Section 3.2.1, "Understanding the Planning Process"](#) sketches out the decisions you need to make, in the rough order you'll need to make them.
- [Section 3.2.2, "Using Page Groups Effectively"](#) introduces the concept of devoting page groups to discrete groups of users, rather than having a possibly diverse set of users share a single page group.

- If you decide that you need to create a portal specifically for content management purposes, [Section 3.2.3, "Configuring a Page Group for Content Management"](#) discusses some points you'll want to consider.
- [Section 3.2.4, "Deciding What Content To Publish"](#) helps you understand the different places from which content can originate and how best to bring them into your portal.

While it may be tempting to skip the preliminary information presented in this chapter, it is strongly recommended that you read through it carefully.

3.1 Getting Up to Speed

Before you dive in and start building your portal, it's essential that you have the background information you need to make informed decisions. This section discusses the learning process associated with Oracle Portal, how to truly understand your audience, and, most important, leads you through all the key concepts you need to know about Oracle Portal itself.

3.1.1 Approaching Your Portal

The way in which you go about building your portal is often a reflection of how you as an individual tend to approach any project of large proportions. The learning process for Oracle Portal seems to fall into three categories:

- Self-learning. Many users new to Oracle Portal who have nonetheless been given complete responsibility for creating something of value to his or her constituency, prefer to immediately begin experimenting with the product, often implementing a small-scale project just to get the feel for what's involved before launching into the larger task of creating a portal for users. While this may be the most immediately satisfying approach for some, bear in mind that it is also the approach that will probably call for the most patience and the most re-work. There are many decisions that, poorly made, will have far-reaching impact on your portal down the line.
- Attending formal education classes, or using self-paced tutorials. Oracle offers a variety of instructor-led training sessions, which can help bring you up to speed on Oracle Portal quickly. Or you can choose from many OBEs (Oracle By Example), self-paced educational units that are free and available 24 hours a day, 7 days a week. Contact Oracle University for more details, or visit the Oracle Portal Education page on OTN (<http://portalcenter.oracle.com>).
- Working with an Oracle consultant. You may want to consider establishing a contract with Oracle Consulting to assess your business needs and develop a portal specifically for you. Once your portal is complete, the consultants will help you learn how to maintain and extend your portal. The advantages of this approach are that your learning process will be centered on your own portal (as opposed to formal training, which is based on generic scenarios); plus, since the learning curve is not an issue, your portal will no doubt be completed more quickly than if you attempt to build it on your own. The disadvantage, of course, is that the size of your organization and its budget may not make Oracle Consulting an option.

3.1.2 Knowing Your Audience

Keeping your audience firmly in mind as you design and implement your portal is key to creating something that will be truly useful. In working with various companies

and moderating our own development process, we've identified six fundamental user groups that you are likely to have in your midst:

- **Viewer** - Consumes information; does not publish it. Requires little, if any, Oracle Portal-specific knowledge or skills. Must know how to search to find desired information; may need to know how to customize the display to hide or reveal content.

[Chapter 2, "Interacting with Your Portal"](#) contains information that will be of use to the viewers of your portal. You may want to give a copy of this chapter to your users; however, it may be more practical for you to use it as an information source as you prepare your own tutorials and how-to guides. That way, you can illustrate Oracle Portal concepts with concrete examples taken from your own portal, thus solidifying the association in users' minds.

- **Content Contributor** - Publishes content to a portal page. Needs to know how to add and edit content; depending on privileges, may also need to know how to manage them.

[Chapter 14, "Working with Items"](#) and [Chapter 15, "Working with Portlets"](#) contain information that will be of use to those who will contribute content to your portal. You may want to use the material in this chapter as the basis for creating or augmenting your own user's guide, based on real-life examples from your portal.

- **Page Designer/Builder** - Creates pages, usually for others to populate with content. Extends pages with simple wizard-created components; feeds portlet requirements to developers. May populate page with content through such means as OmniPortlet and WebClipping. Grants page access to appropriate users and user groups. May set up some reusable components (navigation pages, styles, templates, and so on).

[Chapter 6, "Creating Pages"](#), in particular, contains information targeted to the page designers/builders at your site.

- **Page Group Administrator** - If you are reading this, you're probably a page group administrator. Your tasks include: deciding how to implement the portal: whether to use one page group or many, deciding how deeply to nest pages, and so on; determining the need for and creating custom item and page types; creating categories and perspectives; establishing workflow processes; policing the content contribution effort; feeding requirements to page designers. To maintain consistency, you may have complete or partial control over developing reusable objects (navigation pages, styles, templates, and so on.)

All of the information in this volume, *Building Your Portal*, was developed to help you do your job successfully.

- **Portal Administrator** - Installs and configures Oracle Portal and its subsystems. Sets up users and user groups; monitors performance and maintains acceptable levels; manages the Portlet Repository; performs upgrades and adds software patches; registers portlet providers.

Portal administrators should refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*. The tasks in this User's Guide assume that all necessary configuration activities have already been completed.

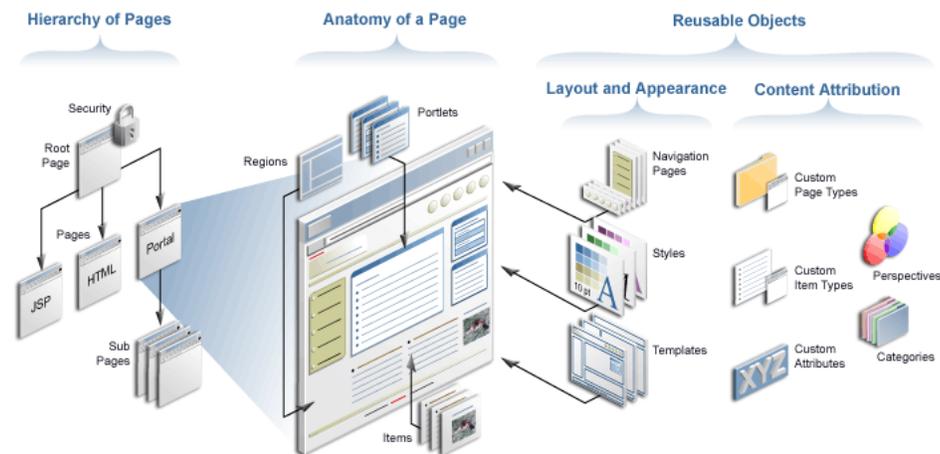
- **Developer** - Builds things, such as components and portlets, for others to include on their pages. Relies heavily on the APIs to extend the capabilities of Oracle Portal; may frequently consult the Knowledge Exchange or the forums for advice or inspiration.

See *Oracle Fusion Middleware Developer's Guide for Oracle Portal*. This book describes the technologies available for portlet developers, discusses how to choose the best technology to meet the given requirements, and guides developers in using the appropriate tools to deploy their developed portlets.

3.1.3 Key Concepts and Terms

This section introduces fundamental Oracle Portal concepts and weaves them together so you'll have a good working knowledge of their importance; however, each concept is treated much more exhaustively elsewhere in this book. Much of what you need to know is depicted in the following diagram:

Figure 3–1 Anatomy of a Page Group



Let's examine this diagram section by section: Hierarchy of Pages, Anatomy of a Page, and Reusable Objects.

Hierarchy of Pages

One of the first things you need to know is that in Oracle Portal, a portal is a collection of one or more *page groups*. At its core, a page group is a hierarchical collection of *pages*. A page is the face of the portal—what the user interacts with to access information and applications. Oracle Portal *pages* are flexible enough to contain any HTML content. They can be created and structured declaratively, through browser-based wizards, or defined programmatically as JavaServer Pages. Information on portal pages is published as either *portlets* or *items*, both of which are described later in this chapter.

A *page group* is exactly what it sounds like: a group of pages for which common attributes and mechanisms can be established that govern the behavior of the pages it contains. You can construct your entire portal within one page group, or use different page groups as sub-portals targeted at specific communities within your organization. Many vital decisions and configurations are specified at the page group level by you, the page group administrator.

At the far left of the diagram, notice that the top of the page group is called a *root page*. Every other page within a page group is a sub-page of the root page. When you create a page group, a root page is automatically created for you using the same name as the page group itself. Root pages are often used to construct your portal's (or sub-portal's) home page.

Another important concept to the development of any portal is that of *security*. As page group administrator, you can grant varying levels of access to entire page groups, individual pages, tabs, or even discrete items on a page. You can either make these objects publicly available, or control them through an *access control list*, which states which users and groups can interact with the object and to what extent. You can also grant permission to manipulate the access control list to other users as required.

Anatomy of a Page

In this section of the diagram, three essential concepts are illustrated: regions, portlets, and items.

Every page can be carved up into one or more *regions*. You accomplish this using tools that are available when editing a page. The following picture shows three pages with three different region configurations.

Figure 3–2 Three Different Region Configurations



Each region has its own set of options that control how the content within it is displayed. For example, you can specify the width of the region relative to the page, what kind of content the region can contain, and whether to display borders around the portlets in a portlet region. Regions can also include one or more tabs.

Regions make it easy to devote areas of the page to specific functions. For example, it is quite common to use the top region of a page for a banner, one alongside the left for a navigation bar, and perhaps another along the bottom for a footer, as shown in this example:

Figure 3-3 Sample Page

The screenshot shows the Oracle Enterprise Manager 10g Release 1 (10.1) Documentation page. The page layout includes a top navigation bar with links for ORACLE.COM, PARTNERS, BUY, DOWNLOAD, SUPPORT, and CONTACT US. A search bar and a 'SELECT COUNTRY' dropdown are also present. The left sidebar contains a 'PRODUCT CENTERS' section with sub-sections for 'TECHNOLOGY CENTERS' and 'COMMUNITY'. Under 'SERVICES', there are links for Downloads, Documentation, Database, Application Server, Enterprise Manager, Developer Suite, JDeveloper, Collaboration Suite, Applications, and More... Under 'RECOURCES FOR', there are links for Developer, DBAs, ISVs, Small & Midsize Businesses, and Getting Started. The main content area is titled 'Oracle Enterprise Manager 10g Release 1 (10.1) Documentation' and lists several document links with PDF and HTML options. A 'Printer View' button is located at the bottom right of the content area. The footer contains copyright information and links for About OTN, Contact Us, About Oracle, Legal Notices and Terms of Use, and Privacy Statement.

In Oracle Portal, all three of these elements are called *navigation pages*. (You can use Oracle Portal to create navigation pages, or have your graphics designer develop HTML to fulfill this need.) The remaining regions, such as the one shown to the right of the navigation bar in this picture, are the placeholders for the *content* your portal displays. In Oracle Portal, there are two types of content: portlets and items.

- Think of a *portlet* as a reusable building block for easily publishing information and applications. You can instantly deliver new content to thousands of users by simply adding a portlet to the users' view of the portal. All portlets come from a data source registered within Oracle Portal, called a *portlet provider*.

The information displayed within portlets comes from a number of sources. Some portlets are as easy to create as checking a box within a wizard; others require knowledge of PL/SQL or Java. You can create portlets in a various ways:

- Publish pages and navigation pages as portlets. While in the creation wizard, simply check a box to indicate that you want to publish the page as a portlet. That way, you can re-use the page on other pages, or make the page available for others to use.
- Use Oracle Portal's wizards to easily create reports, forms, charts, and other types of dynamic components and publish them as portlets. No programming knowledge is required.
- Use your own tools to turn your legacy applications and Web sources into portlets and integrate them through Portal's Application Programming Interfaces (APIs), available in the Portal Developer Kit (PDK). See the *Oracle Fusion Middleware Developer's Guide for Oracle Portal*.

But you don't have to create your own portlets. Simply by installing Oracle Portal, you instantly have access to portlets created by a wide range of third-party vendors registered through Oracle's Partner Program. In addition, by subscribing

to the Oracle Portal Developer Services, you can access a number of services and resources available exclusively to the Portal developer community. Not only will you be able to access the development team within Oracle, but you can tap into the greater community of Portal developers who have acquired expertise in working with portlets. And you can publish Portal development knowledge and experience of your own.

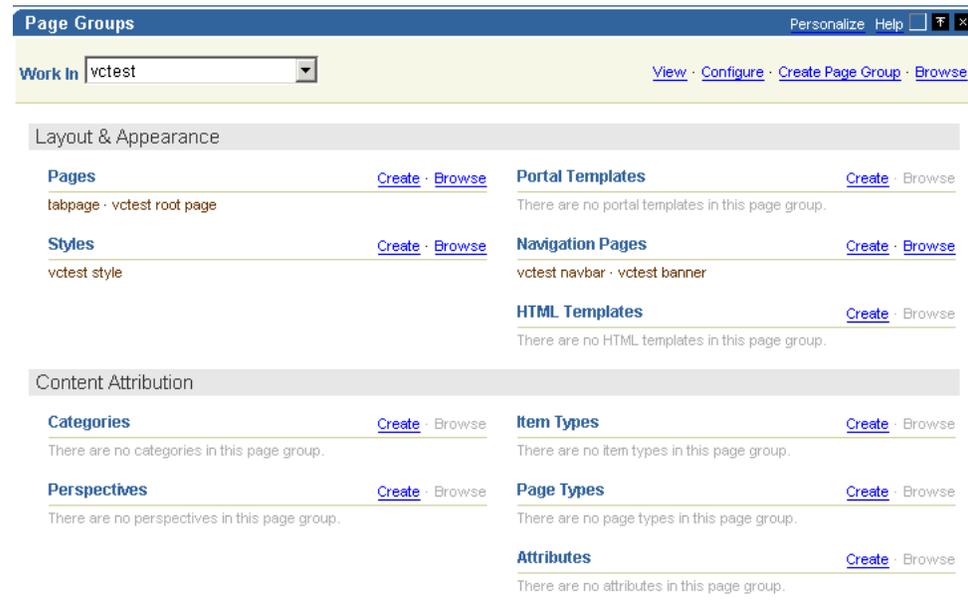
- An *item* is the other basic Oracle Portal building block. More specifically, an item is an individual piece of content (text, hyperlink, image, and so on) that resides on a page in an item region. There are two types of items: content item types, which display user-managed content such as text, files, images, and URLs; and navigation item types, which are used to provide navigation and to access or execute various portal-specific functions. Items are added to the portal through simple wizards and stored in the Oracle Metadata Repository for ongoing management and publishing. If you plan to use Oracle Portal as a content management solution, you'll no doubt rely heavily on the use of items.

Reusable Objects

Reusable objects are created at the page group level and can be used for any page within the page group. For example, you may want to create a consistent color scheme (called a *style*) for every page within your portal. Even though the graphic doesn't depict it, pages themselves can be considered reusable objects, as any page can be published as a portlet and reused/shared elsewhere in the portal, or in remote portals.

Some objects control how pages are laid out and how they appear. Others help users organize and classify information so that others can locate it quickly. The following screen shot depicts the Page Group portlet, which is used to create and manage all reusable objects. The Page Group portlet is an important workspace that you'll use a great deal as you develop your portal.

Figure 3–4 Page Groups Portlet



In most cases, each time a page is displayed it is dynamically assembled and formatted according to the content (portlets and items) and the reusable objects chosen for that page.

Note: Whether or not the page is rebuilt *each* time it is displayed depends on the caching options in place at the time the page request is made.

Layout and Appearance

A *template* is a type of page from which other pages can inherit layout, style, privileges, and even content, thus enforcing consistency across multiple pages. A Portal Template might include a corporate logo, frequently used links at the top, a navigation bar, and a footer that shows the location of the current page within the page group. When you create a new page, you have the option of selecting a Portal Template on which to base it, or to choose no template at all. *Styles* control the colors, fonts, and backgrounds of pages or regions within pages.

When you use the Create Page wizard, you are asked to supply the navigation page, template, and style you want to apply. If you choose not to apply these objects when you create the page, you can always do so later when you edit the page.

Content Attribution

Content attribution concerns you much more if you're building a page group that supports collaboration among your users. Collaboration is chiefly supported through Oracle Portal's content management features, which center on the use of items. Content attribution refers to the process of associating various attributes with each item and page in your portal. These attributes store information and make it easy to group logically related items and pages together. Attributes also enable advanced metadata searches.

When you add a file to the portal, for example, you use the Add Item Wizard. This wizard prompts you for an item type. The kinds of item types that are exposed through the Add Item Wizard are determined by the page group administrator. Suppose you choose the File item type, which comes with Oracle Portal by default. The File item type has certain default attributes, like File Name, Description, Author, and so on, which you as the publisher of the file are expected to supply in order to complete the publication process. These attributes not only supply information about the file you're adding, but allow you (or others) to later construct custom searches so that you can, say, display all the content published by a given author. (Custom searches are easy to build in Oracle Portal.)

But suppose the attributes that come with the File item type aren't sufficient for your needs. Suppose you want to add another attribute called Group Name, to identify the group from which the file originated. With Oracle Portal, you can easily create your own custom attributes using the Create Attribute wizard. At a minimum, simply identify the Group Name attribute as a Text attribute, add it to the definition of the file item type, and you're done.

You may also want to create *custom item types* specifically for your needs. For example, if you're managing an entertainment portal, you might create a custom item type called Movie Review, which includes custom attributes such as Rating, Reviewer, and Producer. You can even specify which attributes are mandatory and which are optional.

Custom page types operate on the same principle. By default, Oracle Portal comes with several different page types optimized for use with different types of content. For example, the Standard page type is used to display both portlet and items, and thus is used for the majority of all portal development. Other page types include JSP pages, which display the results of executing a JavaServer Page, and URL pages, which allow you to include any Web-accessible page within your portal. However, you may

encounter situations where you want to modify the page types already in existence, or require additional page types. For example, you might want to create a Performance Review page for use by managers, which contains attributes for Rating, Employee Name, Employee Rank, and so on. Like custom item types, custom page types are easy to create to meet your specific requirements.

Categories and *perspectives* represent a different type of content attribution at the item level. Both are a means of classifying your content into discrete groups, making it easy for users to locate content. A Human Resources page group might contain categories such as Benefits, Policies, and Payroll. Each time a user adds a piece of content, that content must be assigned to one and only one category (assuming that the Category attribute is exposed for the item type). Users can also search by category and perspective or browse through content that is organized into category and perspective hierarchies.

Perspectives work best when they cut across multiple categories. Because each item can be assigned many perspectives, it's best to reserve them for classifications that take advantage of this strength. In our Human Resources page group, you might choose to make your perspectives reflect the various user groups at the company: Engineers, Design Analysts, Sales Representatives, and so on. It's easy to imagine how the same piece of content, like the company's holiday schedule, would interest all users regardless of their user group. When a user submits a search based on Engineers, Oracle Portal would locate all the content tagged with that perspective, irrespective of category. Engineers would see the holiday schedule, as well as all other content from the Benefits, Policies, and Payroll that had been flagged as being of particular interest to that group. Or, on a portal devoted to travel, the perspectives Inexpensive, Moderate, and Luxury would neatly cut across the categories Lodging, Restaurants, Air Fare, and Rental Cars.

Deciding how to construct all of your attributes is an important part of building your portal taxonomy, and making these decisions should be attended to with care. One of the main benefits of creating a sound attribution model is that it provides you with more flexibility if you choose to publish content dynamically, using the autoquery capability of the custom search portlet. The autoquery feature is extremely powerful, especially when you configure it to display the results in place. Effective use of autoquery gives you tremendous control over how and where you manage and publish content within your portal. In fact, in many cases it is best to manage content in one area or page group and publish it dynamically throughout the portal. See [Section 3.2, "Making Key Decisions"](#) for more information.

3.2 Making Key Decisions

Now that you have an understanding of the basic concepts underlying portal development, you're ready to begin considering the needs of your particular enterprise.

3.2.1 Understanding the Planning Process

This section is intended to give you an idea of the things you'll need to consider as you set up your portal, in the rough order in which you'll need to consider them.

Note: Although it may be quite tempting to simply dive in and start creating pages, you'll find that the more time you invest in planning and making considered decisions in the beginning, the less likely it is that you'll have to go back and reconstruct portions of the portal—or the very structure of the portal itself—later on. Each decision you make at the page group level can have far-reaching effects on the pages residing within.

- Deciding how to structure your portal is perhaps the biggest and most difficult challenge you'll face. Consider the breadth of content you have, as well as each discrete group of users you're trying to satisfy as you decide whether you need multiple page groups, a single page group, or perhaps even an Oracle Instant Portal.
 - Is your portal for internal use only? Will your users be happy with a very simple portal, with a pre-defined set of items and styles and preconfigured pages that offer no flexibility in terms of layout? If your internal users want to exchange content only with each other, consider creating an Oracle Instant Portal, rather than a page group. Although Oracle Instant Portals provided a limited subset of functionality, the trade-off is that the usage and administrative costs are much lower than a typical portal. In fact, you can start loading content into the portal as soon as it's created.
 - What is the relative size of your user base? Does it make sense to contain your portal in a single page group, with a home page and perhaps one page (or one page with sub-pages) devoted to the needs of each user group? Is your user population small enough so you can develop the entire site in a single page with tabs? [Section 3.2.2, "Using Page Groups Effectively"](#) can help you decide how many page groups you need.
 - It is fairly likely that you will have users who wish to publish business documents and other information to the page group (that is, content contributors), as well as users who will merely consume that information (in other words, viewers). How should those two groups interact? Do you want content contributors to create, edit, and publish the content on the same page where it is viewed? Or do you want to have a separate area in which content contributors can work, then use page portlets and custom searches to present relevant information to viewers? To help make this decision, consider whether the *creators* of the information are vastly different from the *consumers* of the information.

For example, suppose you have a group of engineers that will be producing a great deal of content. You want them to be able to create their page structure naturally, without having to yield to a formal set of guidelines and standards. Because the consumers of much of this information are not engineers, however, the potentially unwieldy page structure that might result could well be distracting or confusing to its non-technical audience. In this case, it's best if the developers are allowed to publish as they wish, and for you to superimpose a structure that is natural and pleasing to the consumers using custom searches and page portlets. If the consumers and the creators are the same, however, there's no reason that content creation and consumption can't occur on the same page(s).

See [Section 3.2.3, "Configuring a Page Group for Content Management"](#) for more information on how to create a page group devoted to content management.

- Will different groups expect their search results to be confined to their own areas? By default, the search feature combs all pages belonging to the entire page group to which the current page belongs.¹ If your entire portal is housed in a single page group, someone in Human Resources looking for a particular HR document may be overwhelmed by search results reflecting the entire page group. If you think each group will want their search to be limited to just the data that is relevant to them, consider creating separate page groups for each group within your enterprise.

If you do decide to create multiple page groups, you'll probably want to develop some common objects and place them in the Shared Objects page group so that you can achieve some consistency across work performed by the different groups. Only objects (navigation pages, templates, styles, and so on) in the Shared Objects page group can be used across multiple page groups.

Once you make your decision about what kind of portal makes sense for your organization, it's time to contemplate how to go about actually building your portal. Here are some things you should consider before doing so:

- Do you want each of the pages within your portal to look similar? One way to accomplish this is through the use of *templates*. You can build a Portal Template that has a common navigation bar, footer, and banner, then leave it up to individual content contributors to populate the remainder of the page with content. You might also want to create one template for each user group to clearly identify the page as belonging to that group.

Note: Although you cannot force your page designers/builders to use your template, you can make it the default so that it is the first template listed in the drop-down list in the Page Creation wizard.

- Establish page group wide properties, such as the amount of space to allocate to uploaded files, the default style, navigation page, and Portal Template, and what type of items contributors can add to pages in the page group. You can identify such things as:
 - What level of access will each user or user group have on the pages created within this page group?
 - What template will be selected by default when a new page is created?
 - What navigation page will be selected by default for use as a banner when a new page is created?
 - What style will be applied by default when a new page is created?
 - Will users of this page group have access to HTML Templates, which are built using your own HTML code? (HTML Templates include both Page Skins and Content Layouts. Page Skins place a border or wrapper around a page. Content Layouts format the content of individual regions on the page.)

Page group-wide settings are made either through the Navigator, or from the toolbar that appears along the top of your page while in edit mode.

- Get started on acquiring the portlets you'll need to populate your pages. You may want to have developers start building portlets to encompass data provided by legacy applications, and you may have a need for portlets provided by Oracle's Partner Program or other third party vendors. See [Section 3.2.4, "Deciding What](#)

¹ Although it is possible to use the custom search feature to search multiple page groups, less sophisticated users may not be comfortable doing that.

[Content To Publish](#)" for some ideas on how to make these decisions. Visit otn.oracle.com for more information on acquiring externally available portlets.

- Create, or have your graphics designer create, a style for your portal to determine the colors and fonts used by the pages in the page group. Later on, you can indicate whether page designers can change this style as they develop their pages and whether users who are viewing the pages can apply their own style preferences to the page.
- Create your home page.
 - Decide how many regions you will need.
 - Create, or have your graphics designer create, a navigation bar and banner. You may also want to consider using a footer for links to related sites and Web pages.
 - Add portlets and items to your page.
 - Establish security for the page.

Repeat this process for each page you want to create.

- Remember, as page group administrator, you are in charge of not only making decisions that affect the page group as a whole, but also for developing the procedure by which the content on your portal is developed and maintained. You'll probably want to delegate a good deal of the authority for page creation to others so you don't become a bottleneck. You can do this by assigning the appropriate privileges to other users on the page group's Access tab.

3.2.2 Using Page Groups Effectively

A portal is simply a collection of one or more page groups. This section will give you some pointers to help you decide how many page groups you'll need, but keep in mind that each page group usually has a focus that is largely determined by its viewership:

- Page groups devoted to *viewers* tend to focus on the presentation of the content itself, as opposed to managing that content. Because viewers don't have the privileges necessary to publish content, they become the consumers of information that is published by others. Where that content is managed—in the same or in a different page group—is completely irrelevant to the viewers of the content.

Content typically produced for the consumption of viewers includes:

- Announcements of corporate programs, events, quarterly earning reports, and so on
- Reports that enable users to acquire information and make key business decisions
- News, weather, and stock quotes from syndicated content feeds
- Availability of email, calendar, meeting scheduling tools, and other heavily used business applications
- Smaller portals created and maintained by independent departments within the company
- Business documents and other information published by fellow employees

The following illustration depicts the convergence of many disparate information sources on a single page:

Figure 3-5 Many Data Sources On a Single Page

The presentation of this information is frequently augmented by typical portal services like personalization (the ability for users to specify their own preferences for color schemes, the content that appears, and the layout and content of a page), as well as a sophisticated search engine to help users locate critical information quickly.

- Page groups can also be configured to meet the needs of *content contributors* working in a collaborative manner. In this type of page group, which is tuned for content management, self-service publishing features allow end users to post and share any kind of document or Web content with other users, even those geographically dispersed. For example, consider a development group consisting of engineers, product managers, and quality assurance engineers working at locations scattered all over the world. Each has documents they need to share with members of their own teams as well as the other groups. Nearly every user has the ability to add documents to the page group; certain users have privileges to modify documents produced by other users or groups.

Unlike more generalized page groups, a content management page group relies heavily on Oracle Portal's assortment of collaboration features:

- Check-in/check-out capabilities, so that users cannot overwrite each others changes
- Version control, so that successive versions of a particular item can be retained or overwritten
- A security mechanism, by which content can be protected from unauthorized view or manipulation
- Workflow, which establishes a process through which a document or request flows among users
- Organizational mechanisms to create a content structure that is easily browsed by the portal user

If you're operating in a small environment, with no company firewall or no plans to make content available outside your firewall, you may find that a content management page group is sufficient for your needs. Or, you may want your content contributors to produce and edit their business documents in such a page group, and use the page portlet (or the autoquery feature of the custom search portlet) to expose those documents to viewers, either within a set of pages just for them or within a different page group entirely.

You'll probably want to read this chapter thoroughly before deciding how many page groups you'll need and the focus of each. Your ability to make these key decisions wisely will have a profound impact on the final usability of your portal.

3.2.3 Configuring a Page Group for Content Management

If you're wondering if you should use Oracle Portal as your content management system, or if you should seek out or perhaps continue to use a third party solution, you may want to read the white paper "Manage, Integrate, and Publish Your Enterprise Content" on the Oracle Technology Network (OTN).

Building a content management page group involves many of the same considerations as any other type of page group. There are some additional things you need to consider that are unique to an environment in which users are creating content. These things include:

- Will a single page group meet your content management needs? Or will you need more than one? Consider the following:
 - How many groups of content contributors do you have? How different are their needs?
 - Are the content attribution needs different for each group of content contributors? Your Travel department might require categories such as Hotels, Air Fares, and Rental Cars, while your Financial group needs categories like Statements, Forecasts, and Data Sheets. Then again, you may deliberately want to develop a taxonomy that is general enough to satisfy all users, regardless of departmental role.
 - What is the amount of information produced by each group? Does the amount suggest that each group or department may require its own page group?
 - Do you need to implement different controls for different groups within your organization? If so, you'll want to set up multiple page groups to address these needs. For example, one group may need to keep multiple versions of their files intact, while others don't require this capability. Or you may want to limit the amount of space a particular group can consume on your server. To get an idea of the kinds of settings you can control at the page group level, click Properties in the Navigator next to your default page group and take a look at the fields on each tab.

If you do decide to create multiple page groups to support content management, you'll probably want to develop some common objects and place them in the Shared Objects page group so that you can achieve some consistency across work performed by the different groups. Only objects (navigation pages, templates, styles, and so on) in the Shared Objects page group can be used across multiple page groups.

- Within a page group, can you keep the editing experience fairly simple? Doing so may make it easier for content contributors to add content to your portal. For example, consider creating a Portal Template consisting of a very simple layout: a banner, a navigation area along the left side, a footer, and a content region in the center. For all regions except the main content region, you can de-select the check box Enable Users To Include Content In This Region (one of the region properties). When content contributors access this page, they will see edit controls only in the main content region, thus providing a more streamlined, simplified editing experience.

Another way to simplify the editing experience is to configure the page group so that editing mode is displayed in List view by default (or you can suppress the

other options, Graphical and Layout, entirely). List view organizes all items on the page into a simple list that you can sort according to the most relevant criteria. You can also perform an action on multiple objects simultaneously while in List view.

- Examine the item types provided by Oracle Portal. Are they sufficient for your needs? Will you require additional attributes, or would you like to remove some attributes defined by default? For example, files may have authors, create dates, or keywords associated with them. You may want to include additional attributes, so that you can use the Custom Search portlet to build preconfigured searches based on a given attribute. With the Custom Search portlet, you can collect data together irrespective of category, perspective, item type, and so on. For example, you might want to regularly publish all reports belonging to the category For Review on a weekly basis. To do that, you can use the Publish attribute to specify dates greater than the previous week's publish date. If you construct your attributes wisely, you'll have a great deal of flexibility when creating custom searches.
- How much control do you want to give your page designers and content contributors? Should your page designers be allowed to create sub-pages?
- Establish page group wide properties, including:
 - What level of versioning do you want to enable for all pages in the page group?
 - How do you want to handle the deletion of items? Should the items be "soft-deleted" so that a page manager can "undelete" them later?
 - What template will be selected by default when a new page is created?
 - How long should the New and Updated icons appear beside new and updated items?
 - What navigation page will be selected by default for use as a banner when a new page is created?
 - What style will be applied by default when a new page is created?
 - What item types will be available to users creating new pages?
- Will your users want to use Web Folders to add content to their pages? Web Folders is a Microsoft extension that supports the WebDAV protocol. After configuring Web Folders on a user's computer, the user can browse the contents of any page group through Windows Explorer and drag and drop files into any page to which they have access.
- Do you need to establish any approval or other types of workflow chains so that documents or requests can move from one user to another?

For more detailed information on the features that make Oracle Portal a viable Content Management System (CMS), see "Oracle Portal 10g Release 2 (10.1.2) Technical Overview", available on OTN. If you decide you want to manage your content in an external CMS but publish that content using Oracle Portal, there are at least two methods for doing so:

- Move and copy content from your CMS into the Portal repository. For more information, see the white paper "Using WebDAV Clients to Replicate External Content" on OTN.
- Use a query-based method for exposing your data. For example, you may want to use custom portlets to publish content within a portlet, or you might want to rely on Omniportlet. If you prefer the latter option, consider licensing the FAST Data

Search application and taking advantage of their Omniportlet integration. Or use the PDK or Omniportlet to build a custom solution.

3.2.4 Deciding What Content To Publish

Although your work as page group administrator may not require you to actually create the content displayed in your portal, you no doubt will have a role in determining what kind of content is required and possibly assisting others in producing that content. You will most likely need to work closely with developers at your site, who have the responsibility of building components and portlets for others to include on their pages. Some of the things you should consider in terms of content creation are:

- Are there any reports, charts, forms, or other components you'd like to display? Assuming that the data required is already in the Oracle Portal or another enterprise database, you can create these components yourself without the assistance of a developer.² Just go to the Portlet Builders folder in the Portlet Repository and click Additional Portlet Builders.
- You may need to sift through hundreds or thousands of Web sites to find appropriate content. Make your job easier by using Web Clipping portlet. Web Clipping portlet offers an easy, intuitive way to capture content and functionality from existing Web sites and present them as portlets. Create Web clippings on the fly by navigating to the source Web page and selecting the portion of the page to clip. You can find the Web Clipping portlet in the Portlet Repository's Portlet Builders folder. (**Note:** Web Clipping may be used outside of Oracle Portal only.)
- Publish Web Service, SQL, XML, or CSV (comma separated value, also known as spreadsheet) data easily using OmniPortlet, or let an existing Web content be your data source. OmniPortlet essentially separates the content publishing from the content layout. Whereas changing a portlet's layout often involves regathering the data, with OmniPortlet you can experiment with layouts at will, without ever having to regenerate the data itself. See the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* or the online help for more information. OmniPortlet is available in the Portlet Repository's Portlet Builders folder.
- Browse through the Portlet Repository and see if any of the portlets provided by Oracle Portal will be useful to you. You may also want to check, or have someone else check, the Knowledge Exchange to see if you can incorporate any of the work done by other Oracle Portal developers. In addition, be sure to peruse the Oracle Partner Network Solutions Catalog, an impressive collection of portlets and services offered by our Oracle Partner program. You can see the full list of partners and get a brief description of their offerings at <http://www.oracle.com/webapps/opus/pages/SimpleSearch.jsp>.
- To publish static information, such as corporate announcements or press releases, use *text items*. Oracle Portal provides an integrated Rich Text Editor that provides a WYSIWYG interface for creating formatted HTML.
- Much of your content will probably come from documents produced by fellow employees. If their work has been loaded into Oracle Portal and the correct attributes have been supplied, you'll find that the Custom Search portlet is an excellent means for gathering documents together based on a common set of criteria and displaying them in a portlet. In a nutshell, the Custom Search portlet enables you to define a complex set of portal search criteria that executes a search

² If you are relying on data in another enterprise database, make sure your portal administrator has established the proper database links from the Oracle Portal database to that data source before you begin your work.

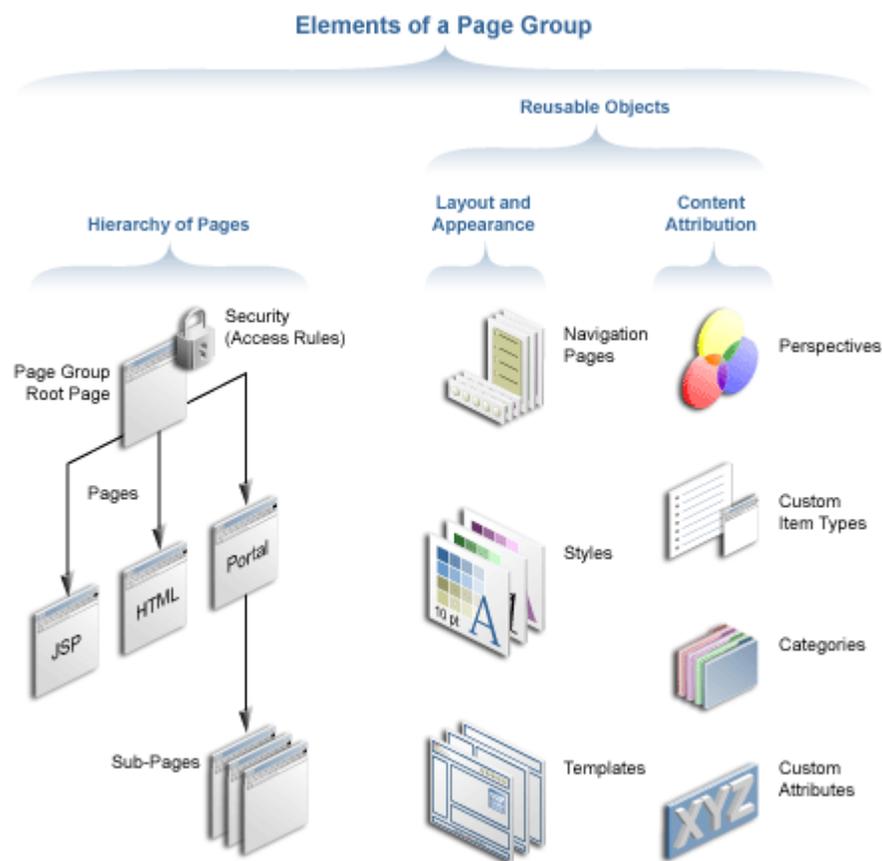
each time the page is rendered. You may want to display all documents created by the Human Resources department in one portlet, for example, and create another portlet with all the internal forms employees may need to reference, irrespective of which department created them. To use the Custom Search portlet, add it to your page from the Portlet Repository, then use the Edit Defaults action to establish your search criteria.

- What kinds of applications are required? Do you have third-party or in-house applications you want to make accessible to your user base? If so, your developers can choose among several paths, ranging from simple to complex:
 - Include the application in the External Applications portlet, then add the portlet to a commonly accessed page.
 - Assuming that the application is Web-enabled, use a Web Clipping, iFrame, or URL portlet to display the application's home page.
 - Use the Portal Developer Kit (PDK) to transform the application into a portlet provider. By doing so, discrete areas of the application can then become portlets that can be manipulated individually.

Working with Page Groups

Page groups contain all the pages, styles, templates, attributes, item types, page types, navigation pages, and other objects you use to define your portal.

Figure 4-1 Elements of a Page Group



This chapter describes how to create and set up a page group. It includes the following main sections:

- [Section 4.1, "Creating a Page Group"](#)
- [Section 4.2, "Deleting a Page Group"](#)
- [Section 4.3, "Delegating Page Group Responsibilities"](#)
- [Section 4.4, "Configuring a Page Group's Page Edit Modes"](#)

- [Section 4.5, "Setting Page Defaults for the Pages in a Page Group"](#)
- [Section 4.6, "Sharing Objects Across Page Groups"](#)
- [Section 4.7, "Troubleshooting Page Groups"](#)

For information on page groups and translation, see [Chapter 19, "Translating Portal Content"](#).

Intended Audience

The content of this chapter is intended for users with at least the page group privilege *Manage All* on a page group (that is, page group administrators). If a particular task requires different privileges, the required privileges are listed before the steps of that task.

4.1 Creating a Page Group

A *page group* is a collection of related pages and all the reusable objects that support those pages. Reusable objects include styles, templates, categories, perspectives, navigation pages, page types, item types, and custom object types. Every portal page belongs to a page group.

Note: Page group administrators must have the global privilege *Create* on the object type *All Page Groups* to create page groups. Portal administrators automatically have these privileges and can create page groups.

To create a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. In the Page Groups portlet, click the **Create Page Group** link.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the **Display Name** field, enter a Display Name to identify the page group to other users.

Use up to 256 characters of any kind, except commas. When the Display Name contains one or more commas, it does not display properly in search-related page group selection boxes.

Oracle Portal uses the Display Name in pick lists, such as the Page Group portlet's Work In drop-down list, page group maps, and other exposed places, such as the Portal Navigator.

All newly-created page groups automatically contain a root page with the Display Name that you provided for the page group.

Note: In the Oracle Portal user interface, the asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

5. From the **Default Language** list, choose the language in which to create the page group.

This list contains all the languages installed for Oracle Portal. For information about installing another language, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

The default language for a page group cannot be changed after the page group is created; however, you can make the page group available in other languages later by creating a translation. See [Chapter 19, "Translating Portal Content"](#).

6. Click **Create**.

When you create a page group, you are automatically assigned as its administrator (that is, you are granted the page group privilege *Manage All* on the page group). You can assign a different page group administrator if desired. See [Section 4.3, "Delegating Page Group Responsibilities"](#).

Note: For information about editing the properties of a Page Group's root page, see [Section 6.9, "Editing Page Properties"](#).

4.2 Deleting a Page Group

Deleting a page group deletes all objects owned by the page group. These include pages, templates, categories, perspectives, navigation pages, styles, attributes, custom page types, custom item types, and all items placed on the pages owned by this page group. Items that are checked out and items in an open state, such as files currently open in a WebDAV client, are also deleted.

Once deleted, you cannot undelete a page group, nor any of the objects deleted as part of the page group.

To delete a page group:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.

A Navigator link can appear on any page. By default, you can find one on the Portal Builder page.
3. Click the **Page Groups** tab to bring it forward.
4. If necessary, click the **Page Groups** path link to go to the top level of the Page Groups tab.
5. Click the **Delete** link next to the page group you will delete.
6. On the confirmation page, click **Yes**.

4.3 Delegating Page Group Responsibilities

Oracle Portal provides a collaborative environment that supports the delegation of responsibilities and the assignment of varied levels of access. Some of these features are realized within page groups. For example, Oracle Portal provides different levels of page group privileges that enable you to control who may perform what actions within the page group.

This section provides information about assigning page group privileges, controlling style privileges, and identifying a page group contact. It contains the following subsections:

- [Section 4.3.1, "Assigning Page Group Privileges"](#)
- [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#)
- [Section 4.3.3, "Specifying a Page Group Contact"](#)

4.3.1 Assigning Page Group Privileges

You can specify who has access to a page group and how much access they have. Access privileges work incrementally, starting at the global privilege level. For example, you can grant the global privilege *View* on the object type *All Page Groups* to the group *Site Wide View*, then explicitly grant the *Manage All* privilege on a particular page group to user *Rose Doe*, who is also a member of *Site Wide View*. All members of *Site Wide View* can see the page group, but *Rose Doe* is the only group member who can do everything else to the page group.

For more information about global privileges, refer to [Appendix B, "Page Group Object Privileges"](#) and to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

For information about controlling access to the individual pages in a page group, see [Section 17.5, "Securing Pages"](#).

This section contains information about specifying who can access a page group in what way. It includes the following subsections:

- [Section 4.3.1.1, "Granting Access to a Page Group"](#)
- [Section 4.3.1.2, "Changing Access to a Page Group"](#)

4.3.1.1 Granting Access to a Page Group

To grant a user or group access to a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Access** tab to bring it forward.
6. In the **Grantee** field, enter the name of the user or group needing access.

Optionally, click the Browse Users or Browse Groups icon and select from the list provided.

Note: Oracle Portal uses the Oracle Internet Directory for identity management. The Oracle Internet Directory serves as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (such as John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal’s locally defined groups.

7. From the list of privileges, choose the level of access to grant to the user or group. For a list and description of page group privileges, see [Section B.2, "Page Group Privileges"](#).
8. Click **Add**.
9. Click **OK**.

Note: If you grant a user *Manage All* privileges on a page group and that user subsequently creates a new page within the page group, even if you remove the user’s privileges, he or she will always be able to access the page through its URL and edit the content and add new content.

4.3.1.2 Changing Access to a Page Group

To change a user or group’s access to a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet’s **Work In** drop-down list, choose the page group to be edited.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. Click the **Access** tab to bring it forward.
6. In the **Change Access** section, find the relevant user or group.

Note: Oracle Portal uses the Oracle Internet Directory for identity management. The Oracle Internet Directory serves as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (such as John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal’s locally defined groups.

7. From the **Privilege** list, choose the new privilege level.

For a list and description of page group privileges, see [Section B.2, "Page Group Privileges"](#).

Note: To completely remove a user or group’s privileges on the page group, click the Delete icon next to the user or group whose privileges are being removed.

8. To make sure that your changes take effect immediately, clear page group cache entries by clicking the **Clear Cache** link.

Because of caching, if you change a user or group’s page group privileges, your changes may not be immediately apparent if the user or a member of the group has already accessed the page group. For example, the user may be able to see icons or links for actions that he or she is no longer authorized to perform. This may cause confusion if the user clicks one of those icons or links and receives an error message. The remedy is to clear cache after making a change to access privileges.

9. Click **OK**.

4.3.2 Controlling Who Can Apply a Different Style to a Page

Oracle Portal provides two settings at the page group level for controlling who can apply different styles to pages:

- The **Allow Privileged Users To Manage Page Style** setting is turned on by default. This enables users with the page privilege *Manage* or *Manage Style* to apply a different style when editing the page.

If you turn this setting off, only users with the page group privilege *Manage All* or *Manage Styles* can choose different styles when editing pages. For information about applying styles to pages, see [Section 11.8, "Applying a Style"](#).

- The **Allow Privileged Users To Personalize Page Style** setting is turned on by default. This enables users with the page privilege *Personalize (Style)* to apply a different style when personalizing the page. Page personalizations affect only the view of the user who made them.

If you turn this setting off, nobody (not even users with the page privilege *Manage* or the page group privilege *Manage All*) can apply a different style when personalizing a page. For information about personalizing a page to apply a different style, see [Section 2.3.8, "Applying a New Style to a Page"](#).

To control who can apply a different style to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, choose the relevant page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. If necessary, click the **Main** tab to bring it forward.
6. Go to the check box **Allow Privileged Users To Manage Page Style**:
 - Select this check box to allow users with the page privilege *Manage* or *Manage Style* to apply a different style when editing the page.
 - Clear this check box to allow only users with the page group privilege *Manage All* or *Manage Styles* to apply a different style when editing pages in the page group.

To make this change take effect immediately, go to the page group properties Access tab and click Clear Cache.

7. Go to the check box **Allow Privileged Users To Personalize Page Style**:
 - Select this check box to allow users with the page privilege *Personalize (Style)* or greater to apply a different style when personalizing the page. Page personalizations affect only the view of the user who made them.
 - Clear this check box to prevent all users from applying a different style when personalizing pages in the page group.

To make this change take effect immediately, go to the page group properties Access tab and click **Clear Cache**.

8. Click OK.

4.3.3 Specifying a Page Group Contact

The page group contact is the person users contact with questions about the page group. This is typically the page group administrator. You can provide an e-mail address for the page group contact and display that address on the pages in the page group.

- [Section 4.3.3.1, "Specifying the Page Group Contact E-mail Address"](#)
- [Section 4.3.3.2, "Adding the Page Group Contact E-Mail Address to a Page"](#)

4.3.3.1 Specifying the Page Group Contact E-mail Address

To specify the page group contact e-mail address:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.

3. From the Page Groups portlet **Work in** drop-down list, choose the page group to be configured.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. If necessary, click the **Main** tab to bring it forward.
6. In the **Contact E-mail** field, enter the e-mail address of the page group contact, for example:
`stiger@mycompany.com`
7. Click **OK**.

4.3.3.2 Adding the Page Group Contact E-Mail Address to a Page

Note: Any user with at least the page privilege *Manage Items With Approval* or *Manage Content* on the page can add the page group contact e-mail address to a page.

Use Portal Smart Links to add the contact e-mail address to your portal pages, templates, and navigation pages. If a page has its own contact, that e-mail address is displayed in lieu of the page group contact e-mail address.

To add the contact e-mail address to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work in** drop-down list, choose the page group that owns the relevant page.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under **Pages** in the Layout & Appearance section, click the relevant page.
This opens the page in Edit mode.
5. Click the **Add Item** icon on the region where the contact e-mail address will display.
If you do not see the Add Item icon, the region may be a portlet region, in which case, you cannot add items to this region.
6. On the resulting page, select **Built-In Navigation Item Types**.
7. From the Built-In Navigation Item Types list, choose **Portal Smart Link**.
If you do not see **Portal Smart Link** in the list, the item type has not been included in the page group. See [Section 5.2.2.3, "Making an Item Type Available to a Page Group"](#).
8. Click **Next**.
9. From the **Portal Smart Link** list, choose **Contact**.
For information about the other smart links, refer to [Section 13.6.6, "Adding a Portal Smart Link Item"](#).

10. Enter your own **Display Name** or select **Use The Default Display Name**.

If you provide your own display name, it will not be translated. The exact text that you enter in the Display Name field will be used for all languages. Conversely, the default display name is translated.

11. Optionally, select an **Image** to display with the link or by itself, and specify **Image Alignment**.
12. Click **Finish**.

4.4 Configuring a Page Group's Page Edit Modes

You can create default views for users who are editing pages within a page group. When users enter page Edit mode, the views you configure here display. Additionally, you can choose to hide or show various Edit mode controls and select the information to be displayed in Edit mode List view. All of these controls are available on the **Configure** tab of page group properties.

This section describes how to define your users' editing experience for all pages in a given page group.

To configure a page group's page Edit modes:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group for which you will configure the Edit mode.
4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. Under **Edit Modes**, click the **Edit** link next to **Current Selection**.
7. Under **Edit Mode Types**, select the edit modes to make available to users.

Choose from:

- **Graphical**—Makes the Graphical view of page Edit mode available as a selection for users with page edit privileges. Graphical view displays page content as it appears on the finished page. Users can add and delete regions in this mode.
 - **Layout**—Makes the Layout view of page Edit mode available as a selection for users with page edit privileges. Layout view enables users to focus on region manipulation without the distraction of page content. Though users can also hide, show, delete, or move content from this view.
 - **List**—Makes the List view of page Edit mode available as a selection for users with page edit privileges. List view lists the items, tabs, and sub-pages associated with the page. Portlets are not listed. You can perform additional configurations of List view in the **List View Properties** and **List View Column Selection** sections.
8. Under **Default Edit Modes**, select the view of page Edit mode you want users to enter by default when they edit pages and navigation pages in this page group.

Under **Default Edit Mode for Pages** and **Default Edit Mode for Navigation Pages**, choose from:

- **Graphical**—When users click an Edit link, the Graphical view of page Edit mode displays.
 - **Layout**—When users click an Edit link, the Layout view of page Edit mode displays.
 - **List**—When users click an Edit link, the List view of page Edit mode displays.
9. Under **Mobile Preview**, select or deselect **Allow Mobile Preview Link**.
- Select this option when you want users to be able to see an approximation of how a page might display when accessed from a mobile device. When you check this box, a Mobile: Preview link displays at the top of the page in page Edit mode.
 - Leave this option clear when you do not want to give users this control.
10. Under **List View Properties**, next to **List View Page Size**, enter the number of rows to display when viewing a page in the List view Edit mode.

If the number of objects on the page is greater than the number of rows specified here, users can click a **Next** link to view more objects.

Note: The page size you set here also sets the page size for the other bulk action pages, including bulk actions for:

- Pages
 - Categories
 - Perspectives
-
-

11. Under **List View Column Selections**, select the columns of information to display for the items, tabs, and sub-pages listed in List view (see [Table 4–1, "List View Column Selection Options"](#)):
- **Hidden Columns**—Lists the columns that are not displayed in the List view of page Edit mode for pages in this page group. To display a column, select it and click the Move icon to move it to the **Visible Columns** list.
 - **Visible Columns**—Lists the columns that are displayed in the List view of page Edit mode for pages in this page group. Use the Move Up and Move Down icons to change the order in which the visible columns display. To remove a column, select it and click the Remove icon.

A **Reset to Defaults** button displays after changes are applied to this page. This button resets Edit Mode configuration to agree with the Edit Mode configuration defined for the Shared Objects page group. Subsequently, this page group inherits changes made to the Shared Objects page group Edit Mode configuration until this page group's Edit Mode configuration settings are changed again.

List View Column Selection Options

[Table 4–1](#) lists and describes the column selection options available to List view of page Edit mode.

Table 4–1 List View Column Selection Options

Column	Description
Author	<p>Displays the name of the user who uploaded or created the object. Author names are truncated to 25 characters in List view. Hover the mouse over the ellipse (...) for names longer than 25 characters. The ellipse's Alt text displays the full author name.</p> <p>The Author attribute is populated automatically for things like tabs and sub-pages. In contrast, for items a value for the Author attribute must be explicitly entered by the user who uploads the items to the portal.</p>
Category	The classification category assigned to the object.
Checkable	Indicates whether Item Check Out is enabled for an item.
Check Out By	Lists the user who has the item checked out.
Check Out Date	Lists the date the item was checked out.
Creator	The user who created/uploaded the object.
Date Updated	Displays the date the object was last updated.
Description	Displays the description of the object. When the description is longer than 30 characters, an ellipse (...) displays at the end of the description. Hover the mouse over the ellipse (...) to view the full description.
Display Name	<p>Displays the name of the item, tab, or sub-page. Click an item name to view the item. Click a tab or sub-page name to drill down to a List View of the tab or sub-page. Some item types, such as Smart Text, Page Path, Basic Search box, and List of Objects, do not have links on their display names.</p> <p>Display names are truncated to 30 characters in List View.</p> <p>Pending, rejected, draft, deleted, hidden, and expired items are displayed in red. Active items are displayed in black.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ For information on which items are accessible in what states, see Section 17.9.3, "Item URL Security". ■ Hover the mouse over the icon next to each Display Name to see the file name of file items, the URL of URL items, and the item's type for all other types of items. Icons next to sub-pages reveal the sub-page's internal name, and icons next to tabs reveal the tab's object type (that is, Tab). ■ For Zip File items, click the icon to unzip the file's content into the current page group.
Expiration Date	The date the object expires, typically specified when the object was created or uploaded to the portal.
File Name	For file-based objects, such as documents or images, the name of the uploaded file, for example sales_notes.txt.
Last Updated By	Indicates which user last updated the item.
Path	<p>This column heading displays only when List View is displaying the results of a search. It displays the path of the page that hosts the related item or sub-page. Click the path to go to the host page.</p> <p>When the path is longer than 30 characters, an ellipse (...) displays at the beginning of the path. Hover the mouse over the ellipse to view the full path.</p>

Table 4–1 (Cont.) List View Column Selection Options

Column	Description
Procedures	Provides a drop-down list of the procedures associated with an item type. Users select a procedure from the list, then call the procedure by clicking its associated icon, which appears next to the list. If no icon is set up, a default icon is used (one for HTTP and one for PL/SQL types) with a link to the call. All Procedure calls open up in the same window as the List View, and upon return, all drop-down lists are reset.
Publish Date	The date the object is published to the portal. This is usually determined by the person who created/uploaded the object.
Size	Displays the size (in kilobytes) of uploaded files.
Status	Displays the current status of the object, for example, <i>Active, Pending, Rejected, Draft, Deleted, Hidden, or Expired</i> . Note: When an item is pending approval, click the Pending status link to go to the Status page for the item (for submitters) or the Approval page for the item (for approvers). For information on which items are accessible in what states, see Section 17.9.3, "Item URL Security" .
Type	Displays the type of object.
URL	Displays the URL of URL-type items. Display is truncated to 30 characters, with the full URL given in the display's Alt text. The displayed URL links to its target.
Version	Displays the number of the current version of the item. If there is more than one version, click the number to go to the Available Versions page where you can view, edit, or delete previous versions, or change the current version of the item if you have the appropriate privilege to do so.

4.5 Setting Page Defaults for the Pages in a Page Group

Page group properties include many options for setting default information for the page group's associated pages. For example, select a default style for all pages, identify a default navigation page (banner), or choose a template to apply to all associated pages. This section discusses these and other page group default setting options. It includes the following sub-sections:

- [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#)
- [Section 4.5.3, "Choosing a Default Style for a Page Group"](#)
- [Section 4.5.4, "Choosing a Default Navigation Page for a Page Group"](#)
- [Section 4.5.5, "Choosing a Default Template or Page Skin for a Page Group"](#)
- [Section 4.5.6, "Specifying Tab Navigation Behavior for a Page Group"](#)
- [Section 4.5.7, "Defining URL Rewrite Rules for a Page Group"](#)
- [Section 4.5.8, "Enabling and Disabling Parameters and Events for a Page Group"](#)
- [Section 4.5.9, "Enabling JavaServer Page Access to a Page Group"](#)

For additional page group configuration tasks, see [Chapter 5, "Preparing to Add Content"](#):

- [Section 5.4, "Setting Up Approvals"](#)
- [Section 5.5, "Managing Item Behavior at the Page Group Level"](#)

4.5.1 Specifying the Doctype for Pages

It is recommended that every page should identify which version of HTML or XHTML it is using. This information can then be used by browsers to help display the page faster, because it knows what to expect from the page.

You identify the version of HTML or XHTML by including a doctype declaration in the code at the beginning of the page, such as:

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

Some examples of doctypes include:

- HTML 4.01 Compatibility mode
- HTML 4.01 Transitional
- HTML 4.01 Strict
- XHTML 1.0 Transitional
- XHTML 1.0 Strict

You can specify the doctype to use for all pages within your portal by specifying the global doctype setting. For information about how to do this, see the Oracle Fusion Middleware Administrator's Guide for Oracle Portal. If the portal administrator allows it, you can override this setting at the page group level, specifying a different doctype for all the pages within a specific page group.

Note: Specifying the doctype does not affect the generated HTML, only the DOCTYPE declaration at the beginning of the HTML.

If you select a strict doctype (for example HTML Strict) some portlet refresh features will be affected due to HTML that is prohibited when using a Strict doctype. Specifically:

- The page assembly timeout option is not shown when editing pages.
- Portlet refresh does not use partial page refresh, instead the whole page is refreshed.

In addition, if you choose the middle image alignment option, your HTML will not validate as Strict. This is because an align attribute has to be used in this case, rather than a CSS attribute and the align attribute does not conform to Strict guidelines.

To specify the doctype for pages in a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work in** drop-down list, choose the relevant page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. If necessary, click the **Main** tab to bring it forward.
6. In the Page DOCTYPE section, select **Choose a specific DOCTYPE for this page group**.

7. Select the doctype that you want to use.
8. Click OK.

4.5.2 Specifying Inheritance Rules for Newly Created Pages

When a page is created, it inherits default property settings from either its page group defaults, its parent page, or the Portal Template on which it is based. Inheritance is based on which option is selected when the page is created:

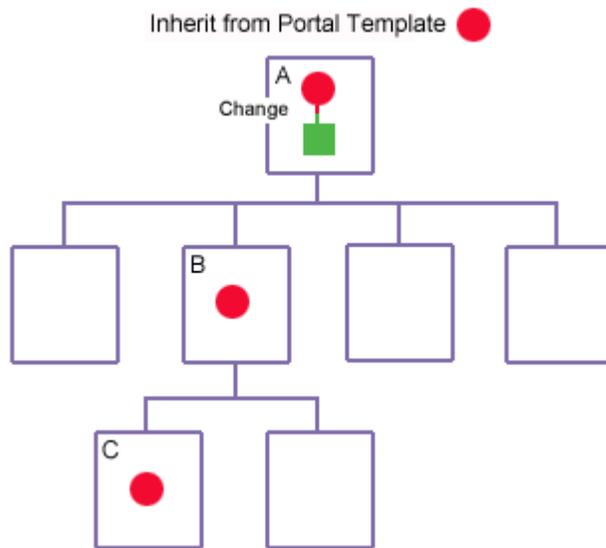
- **Inherit Access Settings from Template** <template name>

This option is available only if the page is based on a Portal Template and the template is set up to enable pages to use their own access settings.

Select this option to use the same access control settings for a page as are specified for the template on which the page is based. If the access control settings for the template are changed, those changes affect all pages based on the template that use the template's access settings (Figure 4-2).

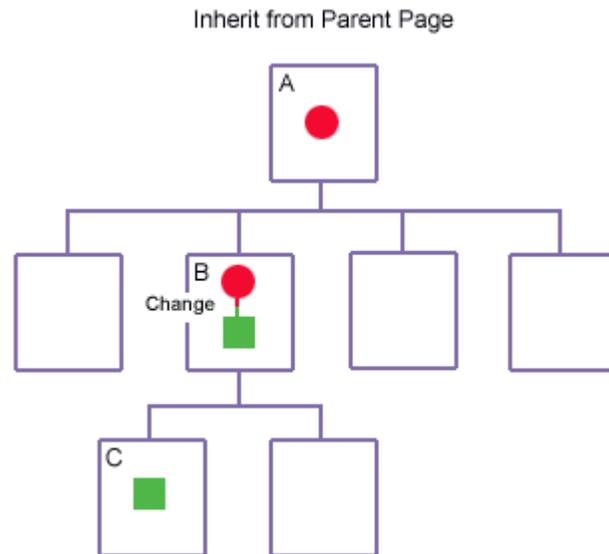
The page's **Access Properties** and **Grant Access** sections do not display when this option is selected.

Figure 4-2 Newly Created Pages Inheriting Access Settings from a Portal Template



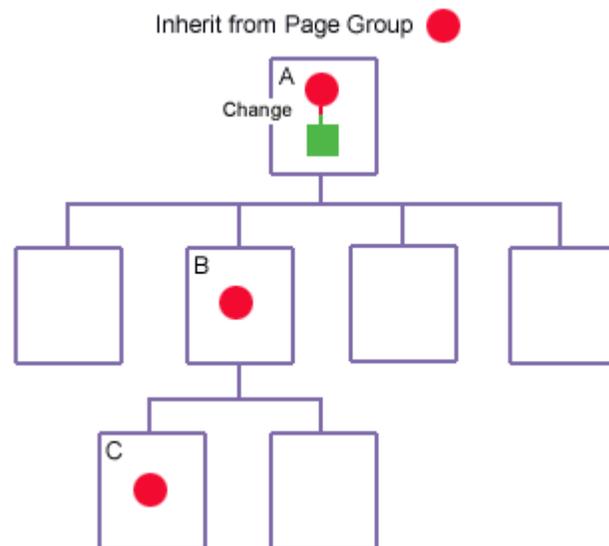
- **Copy Parent Page Properties When Creating Page**

Select this option to use parent page property settings as default settings for any newly created sub-pages. When a new page inherits its default property settings from its parent page, each successive generation inherits its default property settings from the previous generation (Figure 4-3).

Figure 4-3 Newly-Created Pages Inheriting Properties From the Parent Page

- **Use Default Properties When Creating Page**

Select this option to use the page group's default settings for all newly created pages. All newly created pages use the page group's settings for their own defaults, regardless of whether their parent page's property settings are different (Figure 4-4).

Figure 4-4 Newly-Created Pages Inheriting Properties From the Page Group

The following properties are inherited from the parent as page defaults. Note that changes to these parent page properties do not continue to cascade to sub-pages after the sub-pages have been created, with the exception of access rules that are set to inherit:

- Page type
- Page caching option
- Portal Template

- HTML page skin
- Style
- Portlet settings
- Item versioning level
- Contact e-mail
- Category
- Keywords
- Approval process
- Parameters
- Navigation page used for the banner

This is defaulted to the first navigation page portlet on the parent page. If the parent page contains other navigation page portlets, those will also be inherited by new sub-pages.

- Access settings

This includes the settings for **Display Page To Public Users** and **Enable Item Level Security** as well as the access control list (that is, the list of users and groups and their associated privileges).

Any page with the option setting **Display Page To Public Users** becomes a crawlable data source for Oracle Ultra Search. See also *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* for information on configuring portal search features.

Note: When a new page is created, the settings for the property **Default WebDAV Types** is always reset to **Inherit from Parent Page**. This allows any changes to a parent page to automatically cascade down to the child pages.

When property settings are copied from the parent page, all sub-pages are set to Use same portal template as parent page. If the parent page uses a Portal Template for items, the sub-page uses the same Portal Template for items. As long as the sub-page is set to Use same portal template as parent page, subsequent changes to the parent's Portal Template for items setting will cascade to the sub-page.

To specify inheritance rules for newly created pages:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work in** drop-down list, choose the relevant page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. Click the **Edit** link under the **Page Defaults** section.

7. Under the **Page Defaults** heading, select an inheritance rule for the page group.

Choose from:

- **Inherit Access Settings from Template <template_name>**—This option is available when the page is based on a Portal Template for pages, and the template allows access rules other than its own. Select this option to use the same access rules as are specified for the Portal Template for pages. When this option is selected, changes to the template's access rules affect this page.
- **Copy Parent Page Properties When Creating Page**—Select this option to use parent page property settings as default settings for any newly created child pages. The relevant properties are those listed at the beginning of this section.
- **Use Default Properties When Creating Page**—Select this option to use the page group's default settings for all newly created pages. All newly created child pages use the page group's settings for their own defaults, regardless of whether their parent page's property settings are different.

8. Click **OK**.

For information about creating pages, see [Chapter 6, "Creating Pages"](#).

4.5.3 Choosing a Default Style for a Page Group

When you create a page, you can choose a style to define the colors and fonts to be used in the page. To simplify this choice, and to identify a preferred style for the pages in your page group, you can identify a default style. You can also choose **<None>** as the default style.

If inheritance rules specify inheritance from the page group (see [Section 4.5.2](#)), the default style you select for the page group becomes the default style when users create a new page. That is, it is the default selection displayed in the Style drop-down list during page creation. If, when creating a page, the user does not explicitly choose a style, the default style is used.

When a selected style is deleted, all pages and item regions that used it revert to the page group default style. If the page group default style is **<None>**, all pages and regions revert to the system default style.

Note: A hierarchical structure governs when a default style is put to use. For a summary of how default styles are applied, see [Section 11.8, "Applying a Style"](#).

To choose a default style for a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work in** drop-down list, select the page group for which to specify a default style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. In the **Page Defaults** section, click the **Edit** link.

7. From the **Default Style** list, choose a default style for the page group.
This list includes all the public styles in this page group and the Shared Objects page group.
8. Click **OK** to return to the Configure tab.
9. Click **Close**.

The default style is ignored if the option to inherit page properties for new pages from the parent page is enabled for the page group. This is because the new page will automatically inherit its style from its parent page. For more information, see [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#).

For information about creating styles, see [Chapter 11, "Working with Colors and Fonts"](#).

4.5.4 Choosing a Default Navigation Page for a Page Group

Navigation pages are special purpose pages within a page group that are added as page portlets to other pages or to Portal Templates. Typically, they provide standard user interface navigation effects such as navigation bars and banners. They often contain one or more navigation item types that provide navigation within the portal.

When you create a page, you can choose a navigation page to display as a banner in a region at the top of the page. To simplify this choice, and to identify a preferred navigation page for the pages in your page group, you can identify a default navigation page. You can also choose **<None>** as the default navigation page. If inheritance rules specify inheritance from the page group (see [Section 4.5.2](#)), your selection becomes the default selection when a user creates a new page. That is, it is the default selection displayed in the Navigation Page For Banner drop-down list during page creation. If, when creating a page, the user does not explicitly choose a navigation page, the default navigation page is used.

Because the default navigation page is added to a region that occupies the full width of the page, make sure that the navigation page you choose here is suited to a wide, horizontally oriented region.

To choose a default navigation page for a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work in** drop-down list, select the page group.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. In the **Page Defaults** section, click the **Edit** link.
7. From the **Default Navigation Page** list, select a default navigation page for the page group.
This list includes all the navigation pages that have been published as portlets in this page group and the Shared Objects page group.
8. Click **OK** to return to the Configure tab.
9. Click **Close** to return to the Navigator.

The default navigation page is ignored if the option to inherit parent page properties is enabled for the page group. This is because the new page will automatically inherit its navigation page setting from its parent page. For more information, see [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#).

For information about creating navigation pages, see [Chapter 13, "Designing Your Portal's Navigation"](#).

4.5.5 Choosing a Default Template or Page Skin for a Page Group

When you create a page, you can choose a Portal Template or an HTML page skin to define the layout, look, and feel of the page. To simplify this choice, and to identify a preferred template option for the pages in your page group, you can choose a default Portal Template or page skin for a page group. You can also choose to opt out of identifying a default by selecting **Do not use a template**. The option you select for the page group default becomes the initial selection when users create a page.

Note: The default template you select here does not apply to navigation pages. You must specifically select a template for a navigation page.

For a description of the types of templates available in Oracle Portal, see [Section 12.1, "Understanding Templates in Oracle Portal"](#).

To choose a default template option for a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. In the **Page Defaults** section, click the **Edit** link.
7. Under the **Default Template** section, choose a default template option for the page group:
 - **Do not use a template**—Select this option to opt out of specifying a default template or page skin for the page group.
 - **Use HTML Page Skin**—Select this option to specify the HTML page skin to use as the page group default. Then choose a page skin from the list of available page skins. Click the **Preview** button to see how the page skin will display.
The list includes HTML page skins owned by the currently selected page group as well as those owned by the Shared Objects page group.
 - **Use Portal Template**—Select this option to specify the portal template to use as the page group default. Then choose a template from the list of available templates.

This list includes the public templates in this page group and in the Shared Objects page group. For a template to be public, its display setting **Make available for use in this page group** must be selected.

Note: When a page group and the Shared Objects page group both contain a template of the same name, the page group name is added to the template name in pick lists. For example: <template_name> (page_group_name). This assists in distinguishing between templates on pick lists.

8. Click **OK** to return to the Configure tab.
9. Click **Close**.

The default template selection is ignored if the option to inherit parent page properties is enabled for the page group. See [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#).

For information about creating templates and page skins, see [Chapter 12, "Providing a Standard Look and Feel"](#).

4.5.6 Specifying Tab Navigation Behavior for a Page Group

Page group properties include a control for specifying tab navigation behavior, that is, *tab persistence*. Tab persistence allows for the return of users to the last tab viewed. The information is preserved for each user for the entire user session (from logon to logoff).

For example, imagine that you have two tabs on the same page at the same level: Tab1 and Tab2. Tab2 has two sub-tabs: SubtabA and SubtabB. A user navigates to Tab2:SubtabB, navigates to Tab1, then returns to Tab2.

- With tab persistence turned on, when the user returns to Tab2, SubtabB will remain selected and Tab2 : SubtabB will display in the page URL.
- With tab persistence turned off (the default), when the user clicks Tab2, the first sub-tab, SubtabA, will be selected and Tab2 will display in the page URL.

The same principle applies when there are no sub-tabs. For example, when users navigate to Tab2, leave the page, then return, they return to Tab2 when tab persistence is on and they return to Tab1 when tab persistence is off.

There is a performance advantage to leaving tab persistence off. For most page groups, the default is *off*. The Portal Design Time Pages page group is an exception. Its default is *on*. This page group includes the Portal Builder.

To specify tab persistence rules for the page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. If necessary, click the **Main** tab to bring it forward.

6. Under the Page Properties section, go to the check box **Allow Tab Persistence for Pages**:
 - Select this check box to preserve tab navigation information during a user session (tab persistence).
 - Clear this check box to turn tab persistence off.
7. Click **OK**.

4.5.7 Defining URL Rewrite Rules for a Page Group

Page group URL rewrite rules work with the rewrite rules set up in the Oracle HTTP Server to ensure that users are consistently exposed to the same URL for a particular object, regardless of how they access that object.

Use page group rewrite rules to specify rewrite rules for the URLs within the page group. This setting works in conjunction with any rewrite rules you may have created on the Oracle HTTP Server. The Oracle HTTP Server rewrite rules control the appearance of the URL that is used to initially access your portal. The rewrite rules you create on this page control the appearance of the URLs that are used to subsequently navigate within your portal. This is useful for ensuring a consistent appearance to your portal's URLs as users navigate into, then within, the portal.

Page group rewrite rules must be created in conjunction with the rewrite rules you set up on the Oracle HTTP Server. That is, they must replace the same elements in the URL but in reverse. For example, if your middle-tier rewrite rule replaces `/mycompany/` with `/host/portal/dad/`, the rewrite rule you create for your page group must do the reverse: It must replace `/host/portal/dad/` with `/mycompany/`.

This section provides some basic information about setting up rewrite rules on the Oracle HTTP Server and in page group properties. For more information about setting up rewrite rules in the Oracle HTTP Server, refer to the `mod_rewrite` section of the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*.

To set up a rewrite rule on the Oracle HTTP Server, go to the following file:

```
ORACLE_INSTANCE/config/OHS/ohs1/httpd.conf
```

Add the rule to the end of the file. For example, add:

```
RewriteRule ^/mycompany/(.*)$/portal/page/mycompany_dad/mycompany_pgrp/$1 [PT]
```

The rewrite rule in the Oracle HTTP Server may be set up so that when a user types the following URL in the browser, or includes it as a link in another document:

```
http://mymachine.mycompany.com:5000/mycompany/page1
```

It is translated to the actual URL for the page:

```
http://mymachine.mycompany.com:5000/portal/page/mycompany_dad/mycompany_pgrp/page1
```

To keep all of your portal's URLs consistent with those governed by the middle-tier rewrite rule, you would go to the page group's rewrite rule option and enter the search pattern:

```
/portal/page/mycompany_dad/mycompany_pgrp/
```

And enter the replace pattern:

```
/mycompany/
```

The resulting URL would appear in the browser's address bar just as it would for those URLs handled by the middle-tier rewrite rule, that is:

```
http://mymachine.mycompany.com:5000/mycompany/page1
```

To specify a URL rewrite rule for the page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. Click the **Edit** link in the URL Rewrite Rules section.
7. In the **Search pattern** field, enter the portion of the page group URL you will replace.

For example:

```
/portal/page/mycompany_dad/mycompany_pgrp/
```

8. In the **Replace pattern** field, enter the character or characters that will replace the Search pattern.

For example:

```
/mycompany/
```

9. Click **OK** to save your changes and return to the Configure tab.
10. Click **Close**.

4.5.8 Enabling and Disabling Parameters and Events for a Page Group

A *parameter* is a value that is passed between pages and portlets. There are two types of parameters:

- Page parameters
 - Pages can accept and store parameter values.
- Portlet parameters
 - Portlets can:
 - Read page parameter values
 - Update page parameters in response to an event
 - Read parameter values from another portlet (using an application programming interface, API)

An *event* is a user action defined by a portlet developer. User actions include clicking a link, a button, or another control on a Web page. A page designer can specify that an event forces the reloading of the current page or the loading of another page, and optionally passes parameters to the newly loaded page. A portlet's events are specified in the `provider.xml` file.

For more information about parameters and events, see [Chapter 22, "Using Parameters and Events"](#).

When a page group is created, parameters and events are enabled by default. When they are enabled, page designers can add parameters to pages in a selected page group and use the portlet parameters and events that are associated with the portlets placed on pages in the page group. When they are disabled, the use of parameters and events is not allowed, and none of the tabs and fields associated with them display in the user interface.

To enable or disable parameters and events in a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. In the Parameters and Events section, click the **Edit** link.
7. On the resulting page:
 - Select **Enable Parameters and Events** to enable the use of parameters and events in the current page group.
 - Clear **Enable Parameters and Events** to disable the use of parameters and events in the current page group.
8. Click **OK** to return to the Configure tab.
9. Click **Close**.

4.5.9 Enabling JavaServer Page Access to a Page Group

To make JavaServer Pages (JSPs) more useful within your portal, you may wish to add portlets to them. Before you can add portlets to JSPs, you must first enable JSP access to the JSP's page group. Additionally, to use Oracle Portal portlets, you must publish the portlets externally. An externally published portlet is a portlet that has been explicitly made available for users to add to their JSPs. Finally, you reference the portlet by the name you gave it when you published it externally. Reference externally published portlets using JSP tags, such as `<portal:showPortlet>`.

This section provides information on enabling JSP access to a page group and publishing portlets externally. It contains the following subsections:

- [Section 4.5.9.1, "Enabling JSP Access"](#)
- [Section 4.5.9.2, "Publishing a Portlet Externally"](#)
- [Section 4.5.9.3, "Additional JSP Information"](#)

For information about adding portlets to JSPs, including using Oracle JSP tags, see "Integrating Java Server Pages with Oracle Portal," on the Oracle Technology Network:

http://www.oracle.com/technology/products/ias/portal/pdf/pd_jsps_10g.pdf



4.5.9.1 Enabling JSP Access

To enable JavaServer Page access to a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Configure** tab to bring it forward.
6. In the JSP Access section, click the **Edit** link.
7. Select the **Allow External Access** check box.

This is required for both internal and external JSPs.

8. In the **Access Key** field, enter a text string to provide security between the page group and the JSPs.

The access key can contain up to 200 alphanumeric characters (A to Z, a to z, 0 to 9). Do not use spaces, the underscore character (_), or other special characters.

An Access Key is required for both internal and external JSPs.

For your external JSPs to access the page group, you will need to specify this key in the configuration file you create to support your external JSPs. When a JSP is executed, if it includes any externally published portlets, the access key in its configuration file is compared against the access key of the page group. If the keys match, the portlets are displayed.

9. Click **OK** to return to the Configure tab.
10. Click **Close**.

4.5.9.2 Publishing a Portlet Externally

Before you can publish a portlet externally, you must first enable JSP access in the page group. Follow the preceding set of steps before you publish a portlet externally.

To publish a portlet externally:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Browse** link next to the selected page group.

This opens the Portal Navigator.

5. Click the **Externally Published Portlets** link.

If you do not see this link, you may not have enabled the access of JSPs to the page group. See [Section 4.5.9.1, "Enabling JSP Access"](#) for more information.

6. Click the **Externally Published Portlet** link next to **Create New**.
7. On the resulting page, enter a name for the portlet in the **Portlet Name** field.

This name is used within JSPs to identify which portlet to display. The name must be unique within the page group and can contain up to 200 characters. The name must begin with an alphabetic character (A to Z, a to z), and can contain only alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore (_) character. Do not use spaces or other special characters.

8. Click the **Select Portlet** icon, and select the portlet you will use in a JSP.

Clicking the Select Portlet icon takes you into the Portlet Repository. You can drill down through the repository hierarchy to locate the portlet you will use. Once you click the listed portlet, the task is complete. The portlet is published for use with JSPs, and you are returned to the Portal Navigator.

9. Click OK.

4.5.9.3 Additional JSP Information

You can create two types of JSPs for use with Oracle Portal:

- **Internal JSPs** are created within Oracle Portal. Internal JSPs are quick and easy to set up and manage. You create them using the standard page wizards. Internal JSPs are automatically stored in the Oracle Portal system, and are managed and secured by Oracle Portal. For more information, see [Section 6.6, "Creating a JavaServer Page \(JSP\)"](#).
- **External JSPs** are created outside Oracle Portal using a text editor or other external tool. You store external JSPs outside of Oracle Portal. Oracle Portal does not provide any file management or security for external JSPs. There are additional requirements for having Oracle Portal accept and display external JSPs in a page group. You must create a configuration file and install it in the Oracle Portal environment, and modify the server to allow the external JSPs to log in to Oracle Portal. For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

In general, internal JSPs are much simpler to create and use. External JSPs offer more flexibility, are easier to modify, and usually run faster than internal JSPs.

Whether you are using external or internal JSPs, a JSP must be associated with a page group. That page group must be enabled to allow JSP access.

4.6 Sharing Objects Across Page Groups

In most cases, when you create an object within a page group, you can use that object only within that page group. If you want to share an object across page groups, you must either create it in the Shared Objects page group or move it from its page group to the Shared Objects page group.

This section describes the Shared Objects page group and explains how to move content to it from other page groups. It contains the following subsections:

- [Section 4.6.1, "Understanding the Shared Objects Page Group"](#)
- [Section 4.6.2, "Moving Objects to the Shared Objects Page Group"](#)

4.6.1 Understanding the Shared Objects Page Group

The Shared Objects page group is a page group that contains objects that can be shared across a portal's page groups.

The types of objects you can share include attributes, item types, page types, categories, perspectives, templates, navigation pages, and styles. You can move most

of these objects from their page groups to the Shared Objects page group. You cannot move templates and navigation pages. To share templates and navigation pages across page groups, you must create them in the Shared Objects page group.

Pages also cannot be moved to the Shared Objects page group. However, you can publish pages as portlets and share them in that way. For more information, see [Section 8.5, "Placing One Page Onto Another"](#).

The default language of the Shared Objects page group is English. If you create a page group in a language other than English, then try to add an untranslated object from the Shared Objects page group to a page in this non-English page group, an error is displayed. You must provide translations in other languages for shared objects; or, at least, provide a translation for the default language of the page group. For more information, see [Chapter 19, "Translating Portal Content"](#).

This can have implications particularly when you want to share a template over page groups whose base language is not English. For example, consider the objects that belong to a template owned by the Shared Objects page group. Imagine that these objects do not have any translations. You apply the template to a page in page group whose base language is not English. The objects on the template that have no equivalent translation do not display. If you want those objects to display, first you must add translated versions of those objects to the template. For more information, see [Section 19.3.1, "Adding a Translated Item"](#).

The same holds true for navigation pages. That is, a navigation page in the Shared Objects page group must be translated to the default language of a non-English page group in order to use it in that non-English page group.

To create or manage objects in the Shared Objects page group, you must have the appropriate page group privileges on the Shared Objects page group. For example, to create or edit a shared category, you must have the page group privilege *Manage Classifications* on the Shared Objects page group. For more information about privileges, see [Appendix B, "Page Group Object Privileges"](#) and [Chapter 17, "Protecting Your Content"](#).

Note: To move an attribute, page type, item type, category, or perspective from its page group to the Shared Objects page group, you must have the source page group privilege *Manage Classifications* on both the page group and the Shared Objects page group. To move a style you must have the page group privilege *Manage Style* on the source page group and the Shared Objects page group.

4.6.2 Moving Objects to the Shared Objects Page Group

When you want to share an existing object across page groups, you can move it to the Shared Objects page group. When you move different types of objects, different additional actions may result from the move. For example, when you move a category, all of its associated sub-categories are also moved. Its associated category pages are regenerated, and any content on the original category pages is lost.

If the Shared Objects page group contains an object that uses the same name as an object that you move to the Shared Objects page group, Oracle Portal appends a value to the Name (internal name) of the moved object. This is to maintain name uniqueness within the page group.

For example, imagine that the Shared Objects page group contains a category named *sample_category*. Another page group, *Division*, contains a category that is also named *sample_category*. You move *sample_category* from the *Division* page group to the *Shared*

Objects page group. Oracle Portal appends a value to the moved category, such as *sample_category_AABkUWAAJAABpiAAC*. You can revise the internal name, but you cannot give it the same Name as any other object in the Shared Objects page group.

Objects can be moved to the Shared Objects page group (whose default language is English) from a non-English page group only if the object already has an English translation. This applies to all promotable objects: item types, page types, categories, perspectives, attributes, and styles.

To move an object from its page group to the Shared Objects page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group from which to move an object.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Browse** link next to the selected page group.
This opens the Portal Navigator.
5. In the Navigator, click the type of object you will move.
For example, click the **Categories** link.
6. Click the **Move to Shared** link next to the object you will move.

Remember that you cannot move pages, templates, or navigation pages to the Shared Objects page group. You must create these within the Shared Objects page group in order to share them across page groups.

When you move an object to the Shared Objects page group, if an object of the same type with the same name exists in another page group, a value is added to the end of the object's name (in the Shared Objects page group) to ensure that it remains unique across all page groups. For example, if the category *sales* appears in more than one page group, and you move one of these to the Shared Objects page group, it will be renamed automatically in the Shared Objects page group to something like *sales_AAAYq2AAJAAeqAAAC* to maintain its name uniqueness across page groups.

For more information about object naming rules in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. On the confirmation page, click **Yes**.

The moved object is no longer listed under its original parent page. Look in the Shared Objects page group to locate the moved object.

Note: If you promote a non-public style (that is, a style for which the Make Public check box is not selected), the style is moved to the Shared Object page group, but is not made public. If you want other users to be able to use the style, you must explicitly make it public.

4.7 Troubleshooting Page Groups

The Create Page Group link does not display in the Page Groups portlet.

For the Create Page Group link to display in the Page Groups portlet, you must have at least the global privilege *Create* on the object type *All Page Groups*.

Global privileges are assigned through the Portal User Profile portlet. In typical installations, you'll find this portlet on the Portal sub-tab of the Administer tab in the Portal Builder. In the Portal User Profile portlet, enter the user's name, click Edit, and click the Privileges tab to bring it forward.

I do not see a page group listed in the Page Groups portlet. I know the page group exists.

To see a page group in the Page Groups portlet, you must have at minimum the *View* privilege on the page group, or you must have the global privilege *View* on the object type *All Page Groups*.

The View page group privilege is assigned on the page group properties Access tab. The View global privilege is assigned through the Portal User Profile portlet. To get these privileges, speak to your page group or portal administrator.

The Browse Users icon does not display on the Access tab.

The portal administrator may have run the script `serlacl.sql` to enforce role-based security. Role-based security limits privilege grantees to groups. Individual users cannot be granted privileges. The script affects privileges that are granted after it is run. Privileges granted before the script is run remain intact. This means that users who had privileges before the script was run continue to have their individually assigned privileges. After this script is run, the Browse Users icon does not display next to the Grantee field on Access tabs. Additionally, the Privileges tab does not display on the Edit Portal User Profile page.

For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

Many users are able to view my page group, though only a handful have View privileges on it.

Users who do not have the page group privilege *View* on a page group they can nonetheless see probably have a global privilege that gives them access. The most restricted of the global privileges—the *View* global privilege on the object type *All Page Groups*—enables users to see your page group (and everyone else's).

The way to limit the list of users who can view your page group is to limit the users who are granted this global privilege (as well as the list of users who have the View privilege explicitly on your page group).

I've removed some users' access privileges to a page group, but they're still able to access it.

They are probably viewing a cached version of pages in the page group. To ensure that users who no longer have access privileges on a page group do not continue to access some version of it, once you change their access privileges, go to the page group's Access tab, and click the **Clear Cache** link. This will clear the cache of any lingering versions of the page and allow you to more easily see the results of your changes to access settings.

I've given users the Manage Style privilege on one or more pages in my page group, but they're unable to choose a different page style.

Check the Main tab of the page group's properties. One or both of the following options should be selected:

- **Allow Privileged Users To Manage Page Style**

Select this option if privileged users (such as users with the *Page* privilege *Manage Style*) should be able to change the page style for everyone's view of one or more pages in the page group (that is, any page on which they have the Manage Style privilege).

- **Allow Privileged Users To Personalize Page Style**

Select this option if privileged users (such as users with the *Page* privilege *Personalize [Style]*) should be able to change the page style for their own view of one or more pages in the page group (that is, any page on which they have the Personalize [Style] privilege).

The person who created the page group has left our department. This person is listed as the contact at the bottom of every page in our department's page group. How do I change this?

You may be in luck! If your former contact used a Portal Smart Link to add contact information to each page, all you must do is change the page group contact information. You'll find this on the Main tab of page group properties. Change the entry for the **Contact E-mail** field.

If your previous contact added the contact information using, for example, a text item, you must edit each affected text item. If this is the case, we suggest that you use this opportunity to add a Portal Smart Link instead. For more information, see [Section 4.3.3.1, "Specifying the Page Group Contact E-mail Address"](#).

When I create a new sub-page, its property settings are nothing like those of its parent page. How do I get sub-pages to have similar settings to their parent pages?

You can set up inheritance rules to inherit property settings from a page's parent page or its page group. A page's parent page is the page immediately preceding it in the page hierarchy. A page's page group is the page group under which the page was created.

You can specify inheritance rules that govern a page group on the Configure tab of page group properties.

On the Configure tab, click the **Edit** link under the **Page Defaults** section. Under the Page Defaults heading on the resulting page, choose from:

- **Copy Parent Page Properties When Creating Page**—Select this option to use parent page property settings as default settings for any newly created child pages. The relevant properties are those listed at the beginning of this section.
- **Use Default Properties When Creating Page**—Select this option to use the page group's property settings as the default for all newly created pages in the page group. This differs from the Copy Parent Page Properties option in that all newly created child pages use the page group's settings for their own defaults, regardless of whether their parent page's property settings are different.

For more information, see [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#).

Differentiating between page group and page properties can require a little thought when a sub-page is created directly off the page group's root page. The settings for the page group's root page properties are not the same thing as the settings for the page group's properties.

Page group properties are those that display when you click the **Configure** link next to a page group selected in the Page Groups portlet's **Work In** drop-down list. They're also displayed when you click the **Properties** link next to **Page Group** in the toolbar at the top of a page that is in Edit mode.

Page properties are those that display when you click the **Properties** link next to **Page** in the toolbar at the top of a page that is in Edit mode.

Some properties are common to both sets; however, those properties that are set at the page group level are potentially more widely applied than those set at the page level.

I selected a default style for my page group, but new pages are not using that style.

Check your inheritance rules. It could be that they are set up to inherit defaults from the parent page rather than the page group.

To set up inheritance rules so that newly created pages inherit defaults from the page group, go to the **Configure** tab of page group properties, click the **Edit** link under **Page Defaults**, and select the radio button for **Use Default Properties When Creating Page**. The next time you create a page in this page group, its style default will be the same as the one set at the page group level.

I have selected a default template/page skin for my page group, but it is not the default selection for newly created pages in my page group.

Check your inheritance rules. It could be that they are set up to inherit defaults from the parent page rather than the page group.

To set up inheritance rules so that newly created pages inherit defaults from the page group, go to the **Configure** tab of page group properties, click the **Edit** link under **Page Defaults**, and select the radio button for **Use Default Properties When Creating Page**. The next time you create a page in this page group, it will use the default template/page skin you have chosen for the page group.

I cannot remove the page skin that is applied to my page.

A page's template options are located on the **Template** tab of the page's properties. On this tab, make sure that the option **Do not use a template** is selected.

If your page is based on a Portal Template, it could be that the template incorporates a page skin. When a page is based on a Portal Template, it inherits the template's HTML page skin (if one is applied). On the pages that use the Portal Template, the template's HTML page skin cannot be removed or overridden by another HTML page skin. This means when you are editing a page based on a Portal Template, you do not have the option to choose an HTML page skin. If you want to make your own page skin selection, you must first detach the page from the Portal Template.

Alternatively, if you have privileges on the template, and you're sure all other users of this template can live with the change, you can edit the template and remove its HTML page skin.

New pages are not inheriting their access privileges from the page group as I have specified.

It is likely the pages in question are based on a Portal Template. Look at the Access tab for the template's properties. If the option **Enable Pages To Have Different Access** is not selected, the access rules specified for the template are being enforced on all pages using the template. In such cases, the Access tab does not display for pages that use the template.

For the template, select the **Enable Pages...** option if you want pages that are based on the template to be able to have access rules that differ from those defined through the template.

The Access link in the page toolbar on pages that use the template may not display immediately. In this case, go to pages that use the template, and enter Edit mode. Click the **Page: Properties** link in the toolbar at the top of the page. Click the Access tab to bring it forward. Make your changes to access settings. Be sure to click the **Clear Cache** link after you have made your changes. This will remove any legacy privileges from the cache, enabling newly-added users and groups to have access, and preventing newly-removed users and groups from gaining access.

You may also detach the page from the template to regain control of access settings at the page level. Doing this means any additional changes made to the template will not cascade to the page from which it was detached.

I do not see the *Move to Shared* link next to my template, page, or navigation page in the Portal Navigator.

Of all the page group objects, only these three cannot be moved to the Shared Objects page group. You must create them anew within the Shared Objects page group in order to share them across page groups.

For more information, see [Section 4.6, "Sharing Objects Across Page Groups"](#).

You can share pages across page groups by publishing them as portlets. Pages published as portlets are available to all page groups through the Portlet Repository. For more information, see [Section 8.5, "Placing One Page Onto Another"](#).

I have exposed my portal in both Spanish and English. I have added a file item to the Spanish version. It is also displaying in the English version.

Assuming that your portal's default language is English, any content you provide to translated versions of your portal also displays in the default language version (in this case, the English version). Add an English translation of the file to the English version, and that will be displayed in lieu of the Spanish version you uploaded first.

Once an English translation of the document is added to the portal (in the same location), users of the English version of the portal, will see only the English version of the document.

For more information, see [Section 19.3.1, "Adding a Translated Item"](#).

Preparing to Add Content

This chapter shows you all the different things you can do to the content in your page group to make it easier for your users to locate and work with the content. It contains the following main sections:

- [Section 5.1, "Things You Can Do with Content"](#)
- [Section 5.2, "Working with Attributes, Item Types, and Page Types"](#)
- [Section 5.3, "Setting Up Content Classification"](#)
- [Section 5.4, "Setting Up Approvals"](#)
- [Section 5.5, "Managing Item Behavior at the Page Group Level"](#)
- [Section 5.6, "Troubleshooting Content Management"](#)

Intended Audience

The content of this chapter are intended for users with at least the *Manage All* privilege on a page group (that is, page group administrators). If a particular task requires different privileges, the required privileges will be listed before the steps of that task.

5.1 Things You Can Do with Content

Portals are all about bringing together the information that users need to do their jobs more effectively. Since managing business documents and other content is an important part of most jobs, and since the portal is the focal point for user collaboration and the logical location to publish and access business content, it only makes sense that content management features should be part of the Oracle Portal framework.

- Oracle Portal includes several attributes, page types, and item types that are intended as a starting point for describing the content in your portal. If you find that you wish to store more information about the pages and items in your portal, you can create your own attributes and add them to page and item types. You can also create your own page and item types. See [Section 5.2, "Working with Attributes, Item Types, and Page Types"](#).
- Because of its self-service features, a portal has the potential to contain a great deal of content. To make it easier for your users to find the information stored in the portal, Oracle Portal provides the ability to classify content using categories and perspectives. Users can then search for content of a particular category (for example, Sales Report), or that is written from a particular perspective (for example, Sales Representative). See [Section 5.3.1, "Working with Categories"](#) and [Section 5.3.2, "Working with Perspectives"](#).

- To ensure validity of content, Oracle Portal can route content for approval before it is published on the page. Simple or multi-step processes can be defined with single or multiple reviewers at each step. Notifications are sent to each approver in the approval process indicating that action is required, while the Approval Status portlet tracks the item's progression from the contributor's point of view. Expiry notifications let users know about content that will expire soon. See [Section 5.4, "Setting Up Approvals"](#).
- Additional features support collaborative document creation, ease content management tasks, and make finding published items very easy. These features include item version control, check-in/check-out, publish and expiration dates, and automatic indexing. Users can also subscribe to items or pages and are notified whenever the subscribed content changes. See [Section 5.5, "Managing Item Behavior at the Page Group Level"](#).

5.2 Working with Attributes, Item Types, and Page Types

Oracle Portal provides an assortment of base attributes, page types, and item types that you can expose to the user community. Each page and item type includes attributes that are used to store information about the page or item. If the base page and item types do not quite meet your requirements, you can create your own page and item types. This means that you can control what information is stored by specifying which attributes to include in page or item types. Furthermore, if the base attributes do not cover the kind of information you want to store about your pages or items, you can create your own attributes and add those to your page and item types. You can also control exactly which page and item types are made available to the users of your page groups.

Note: One way to control the display of attributes in item regions is through the use of HTML content layout substitution tags. For more information, see [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#).

Oracle Portal also includes a selection of built-in extensible item types. If you do not want to create your own item types, you can edit these built-in item types to meet your requirements.

This section contains the following sub-sections:

- [Section 5.2.1, "Working with Attributes"](#)
- [Section 5.2.2, "Working With Item Types"](#)
- [Section 5.2.3, "Working with Page Types"](#)

Note: Any user with at least the *Manage Classifications* privilege on a page group can create and manage attributes and types. To edit the built-in page and item types, you must have at least the *Manage Classifications* privilege on the Shared Objects page group.

5.2.1 Working with Attributes

There are two types of attributes:

Content Attributes

Content attributes are associated with item types and page types, and store information about an item or page, such as the associated category, description, or perspectives. These attributes are included in the add and edit pages where users can provide information about the item or page they are adding or editing. Page group administrators can create their own item types and page types and specify exactly what information they want users to supply by choosing which attributes to include. In addition, page group administrators can create their own attributes for containing extra information.

For a list of the content attributes provided by default, see [Section A.2.1, "Base Content Attributes"](#).

Display Attributes

Display attributes are associated with regions, and display information about an item or portlet, such as the author, display name, and creation date. Page designers can choose which attributes to display in a region. Some content attributes can also be used as display attributes. See [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#).

For a list of the display attributes provided by default, see [Section A.2.2, "Base Display Attributes"](#).

5.2.1.1 Creating an Attribute

To create an attribute:

1. In the Navigator, click the link for the page group in which you want to create the attribute.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

2. Click the **Attributes** link.

Tip: If you create an attribute in a particular page group, that attribute is available only in that page group. If you want the attribute to be available in multiple page groups, either create it in the Shared Objects page group, or (if the attribute already exists) promote it to the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#).

3. Next to Create New, click the **Attribute** link.
4. In the **Display Name** field, enter a descriptive name for the attribute. The display name is displayed as a label for the attribute whenever the attribute is used.

Use up to 256 characters of any kind, except commas. When the Display Name contains one or more commas, it does not display properly in search-related attribute selection boxes.

Although the attribute display name has no enforced uniqueness requirement, consider keeping it unique across your page groups. If you do not, users see duplicate names on attribute pick-lists, and are unable to determine which attribute belongs to which page group. For example, attributes display on a pick-list when a user creates a custom item type or selects custom search criteria.

5. From the **Datatype** list, choose the type of data that the attribute will store.
 - **Boolean** stores a value of 1 (for TRUE) or 0 (for FALSE).

- **Date** stores a date in the format DD-MON-YYYY HH12:MI PM, for example, 20-SEP-2004 10:57 AM.
 - **File** stores a file, such as a Microsoft Excel spreadsheet or an HTML document.
 - **Number** stores a numeric value, for example, 8479.
 - **PL/SQL** stores PL/SQL code, for example, `htp.print('Hello World');`
 - **Text** stores a text string.
 - **URL** stores the URL of a Web site or Web page, for example, `http://www.oracle.com`.
6. Click **Create**.
 7. Click **Close**.

5.2.1.2 Editing an Attribute

You can specify how an attribute is displayed when users add or edit an item or page of a type that includes the attribute. For example, you can change the label for the attribute by editing the attribute's display name.

To edit an attribute:

1. Use the Navigator to browse to the attribute that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the attribute is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the attribute, click the **Edit** link.

This opens the Edit Attribute page. The options available on this page vary a little from those options available when you first create the attribute. Notably, the page includes a **Name** attribute.

3. In the **Name** field, edit the name of the attribute. The name is used internally only.

The default value in the **Name** field is taken from the **Display Name** provided when the attribute was created. Spaces and special characters are discarded.

For example, if the Display Name is R & D Team Lead, the Name is RDTeamLead.

The **Name** is not case sensitive. It must be unique within its page group and the Shared Objects page group. Use up to 256 alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore character (`_`); spaces and other special characters are not allowed.

4. In the **Display Name** field, edit the descriptive name of the attribute. The Display Name identifies the attribute to other users. It is used in the Portal Navigator and as the label for the attribute value wherever the attribute is used.

Use up to 256 characters of any kind, except commas. When the Display Name contains one or more commas, it does not display properly in search-related attribute selection boxes.

Any change you make here does not affect the value in the **Name** field. Changes to the attribute **Display Name** are not reflected immediately on cached pages. To make the change display immediately, you must clear the page group's cache. Go

to the Access tab of the page group that owns the attribute, and click the **Clear Cache** link.

Although the attribute display name has no enforced uniqueness requirement, we recommend that you try to keep it unique across your page groups. If you do not, users will see duplicate names on attribute pick-lists, and will be unable to determine which attribute belongs to which page group. For example, attributes display on a pick-list when a user creates a custom item type or selects custom search criteria.

5. Select **Enable Translations** if you want users to be able to translate the values stored in the attribute into different languages.

If you clear this check box, the values stored in the attribute will be the same in all languages.

6. For Date, Number, and URL attributes:

In the **List Of Values** field, enter the name of a list of values from which users can choose a value for the attribute. If you are not sure of the name of the list of values, click the **List** icon and select from the list provided.

Note: The list of values must already exist. Multi-valued attributes are not supported for lists of values. That is, users are able to choose only one value from an attribute list of values. This means that attribute values can be displayed in combo boxes and pop-ups, but not as check boxes, drop-down lists, or radio buttons.

7. For PL/SQL attributes:

In the **PL/SQL Execute Options** radio group, select which privileges to use when executing the PL/SQL stored in the attribute:

- **Public** executes the PL/SQL with the privileges of the Oracle Portal PUBLIC schema.
- **Creator** executes the PL/SQL with the privileges of the schema associated with the user who created the item or page that includes the PL/SQL attribute.
- **Schema** executes the PL/SQL with the privileges of a specific schema. If you select this radio button, enter the name of the schema in the field provided. If you are not sure of the name of the schema, click the **Browse Database Schemas** icon and select from the list provided.

8. For Text attributes:

- a. In the **Length** field, enter the number of characters the attribute can store.

Values can be provided only when the **Display Option** is Single-line Field. If you specify a length and then select a **Display Option** of **Multi-line Field** or **List Of Values**, the **Length** field is cleared and becomes display only.

- b. In the **Display Option** radio group, select how to display the attribute when users add or edit an item or page of a type that includes the attribute:

- **Single-line Field** displays the attribute as a field that contains a single line of text.
- **Multi-line Field** displays the attribute as a field that contains multiple lines of text.

- **List Of Values** displays the attribute as a list from which users can choose a value.

If you select this radio button, enter the name of the list of values in the field provided. If you are not sure of the name of the list of values, click the **List** icon and select from the list provided.

Note: The list of values must already exist. Multi-valued attributes are not supported for lists of values. That is, users are able to choose only one value from an attribute list of values. This means that attribute values can be displayed in combo boxes and pop-ups, but not as check boxes, drop-down lists, or radio buttons.

9. Click **OK**.

5.2.1.3 Deleting an Attribute

When you delete an attribute, you also remove the attribute and its values from any items and pages that include it.

Take care when deleting an attribute from the Shared Objects page group. Attributes in the Shared Objects page group may be used across page groups. Deleting an attribute from Shared Objects removes it from all page groups that use it.

To delete an attribute:

1. Use the Navigator to browse to the attribute that you want to delete.
2. In the row for the attribute, click the **Delete** link.
3. In the confirmation page, click **Yes**.

5.2.2 Working With Item Types

Item types define the contents of an item and the information that is stored about an item. The information stored about an item is determined by the attributes of the item type.

By default, Oracle Portal includes several base item types to cover the most common content that contributors will want to add. Oracle Portal also includes several built-in custom item types so that content contributors can get started adding content right out of the box. For a complete list of base and built-in item types, see [Section A.4, "Base Item Types"](#).

However, you may find that you want to store more information about your items than the built-in item types allow. If this is the case, you can extend the built-in item types to meet your requirements. You can add different attributes to the built-in item types to store exactly the information that you want. You can also add calls to PL/SQL and HTTP procedures and even pass attributes to the parameters of those procedures. For example, if the Review item type includes a Search attribute to store a search string, you could add a procedure call to a search engine and pass the search string to that search engine. When users run the search engine, the search results for the search string are displayed.

If you prefer, you can create your own item types. You can base an item type on one of the base item types. Basing your item type on a base item type means that your item type will inherit certain attributes. You can then extend your item type to include other attributes and procedure calls. You can also choose to base your item type on

none of the base item types (choose <None> from the **Base Item Type** list), which gives you complete control over the attributes included in the item type.

5.2.2.1 Creating an Item Type

To create an item type:

1. In the Navigator, click the link for the page group in which you want to create the item type.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If you create an item type in a particular page group, that item type is available only in that page group. If you want the item type to be available in multiple page groups, either create it in the Shared Objects page group, or (if the item type already exists) promote it to the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#).

2. Click the **Item Types** link.
3. Next to Create New, click the **Item Type** link.
4. In the **Display Name** field, enter a descriptive name for the item type. The display name is used in the Portal Navigator and the Add Item **Item Type** list, so shorter display names are better.

Use up to 256 characters of any kind, including spaces.

5. From the **Base Item Type** list, choose the base item type from which you want your item type to inherit attributes. You can choose from None, Base File, Base Image Map, Base Image, Base PL/SQL, Base Page Link, Base Text, and Base URL.
6. Click **Create**.
7. Click **Close**.

5.2.2.2 Editing an Item Type

When you first create an item type, it includes exactly the same attributes as the base item type on which you based it. If you chose <None> as the base item type, your new item type includes only the Display Name attribute. To truly customize the item type, you need to edit it to add more attributes, and possibly procedure calls.

Note: You cannot edit the base item types. However you can extend the built-in item types.

5.2.2.2.1 Editing the Basic Properties of an Item Type

To edit the basic properties of an item type:

1. Use the Navigator to browse to the item type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Note: If the item type is shared (or is one of the built-in item types), it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the item type, click the **Edit** link.

This opens the Edit Item Type page. The options available on this page vary a little from those options available when you first create the item type. Notably, the page includes a **Name** attribute.

3. In the **Name** field, edit the name of the item type. The name is used internally only.

The default value in the **Name** field is created from the **Display Name** provided for the item type when it was created. The **Name** is truncated to 30 characters and all spaces and special characters are discarded. For example, if the Display Name is *Science & Math Images*, the Name is *ScienceMathImages*.

The **Name** is not case sensitive. It must be unique within its page group and the Shared Objects page group. Use up to 30 alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore character (_); spaces and other special characters are not allowed.

4. In the **Display Name** field, edit the descriptive name of the item type. The Display Name identifies the item type to other users. It is used in the Portal Navigator and Add Item **Item Type** list, so shorter display names are better.

Use up to 256 characters of any kind, including spaces. Changes to the item type **Display Name** are not reflected immediately on cached pages. To make the change display immediately, you must clear the page group's cache. Go to the Access tab of the page group that owns the item type, and click the **Clear Cache** link.

Any change you make here does not affect the value in the **Name** field.

5. In the **Description** field, enter information about the item type that may be useful to others, such as its arguments, functionality, or usage. The description is displayed only when editing the item type.
6. In the **Icon** field, enter the path and file name of an image to associate with the item type. Click **Browse** to locate the image if you are not sure of its path or file name. When you click **Apply** or **OK**, the file is uploaded to the Oracle Metadata Repository.

Note: This icon is not currently used within Oracle Portal. The icon may be used in future releases.

7. You can create your own help to display when users click the context sensitive help icon while adding an item of this type. To associate your custom help with the item type, enter the URL of the help in the **Help URL For Add Item Wizard** field
8. You can also create your own help to display when users click the context sensitive help icon while editing an item of this type. To associated your custom help with the item type, enter the URL of the help in the **Help URL For Edit Item Wizard** field.
9. Click **OK**.

5.2.2.2 Adding Attributes to an Item Type

To add attributes to an item type:

1. Use the Navigator to browse to the item type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the item type is shared (or is one of the built-in item types), it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the item type, click the **Edit** link.
3. Click the **Attributes** tab.
4. In the **Available Attributes** list, select the attributes that you want to add to the item type.
5. Click the **Move** icon to move the selected attributes to the **Selected Attributes** list.
The order of attributes in the **Selected Attributes** list determines the order in which the attributes are displayed when users add or edit an item of this type. Use the icons to the right of the list to change the order.
6. Click **Apply** to add the attributes to the item type.
7. When you have added the attributes, you can change their display properties if necessary:

- a. In the **Default Value** field, enter the value to use by default for the attribute. If content contributors do not specify a value for the attribute, the default value is used. If you provide a default value, contributors will not be able to set the attribute to a null value, they can only replace the default value with another non-null value. You can leave this field blank if you prefer.

Multi-valued attributes are not supported for lists of values. That is, users are able to choose only one value from an attribute list of values. This means that attribute values can be displayed in combo boxes and pop-ups, but not as check boxes, drop-down lists, or radio buttons.

If you are supplying a default value for the base item link item type, you must enter the target item's globally unique identifier (GUID), which you can determine through the item's property sheet. The GUID is the alpha-numeric value at the end of the item's Item Link, for example F43069B7A66E553AE030B98B6C883291. Using the GUID is also a way to provide a default value for an item that belongs to another page group--a normally prohibited action. Using any other type of item identifier for the default value, such as the item's internal name, results in an error when users try to add the custom item to a page.

You can use PL/SQL expressions and function calls to determine the default value for an attribute. You must precede the expression or function call with a # character. The function being called must already exist in the database and must be prefixed with its owning schema.

For example:

- To set the default value of the Author attribute to the current user, you would set the default value of the attribute to #USER#.

- To set the default value of the Publish Date attribute to the first day of the month, you would set the default value of the attribute to `#TO_CHAR(LAST_DAY(SYSDATE)+1, 'DD-MON-YYYY HH12:MI PM')`.

- To set the default value of a custom Project ID attribute to the current project to which the current user is assigned, you would first need a function that returns the ID of the project. The function might be something like the following (assuming that a user is assigned to only one project on any specified date):

```
create function GET_CURRENT_PROJECT return VARCHAR2 as
  project_id VARCHAR2 (30);
begin
  select pa.id
  into project_id
  from project_assignments pa
  where SYSDATE between pa.start and pa.end --selects current assignment
  and pa.assignee = WWCTX_API.GET_USER; --gets name of current user
  return project_id;
end;
```

If the `GET_CURRENT_PROJECT` function was created in the `PROJECTS` schema, you would set the default value of the Project ID attribute to `#PROJECTS.GET_CURRENT_PROJECT`.

Note: You cannot pass attribute values as parameters to a function when it is called from an attribute default value. You can however pass PL/SQL expressions as parameters. You can use expressions and function calls only for the default values of attributes, not for the actual values of attributes. If you are using an expression to determine the default value of a date attribute, you must make sure that the date value is converted to the `DD-MON-YYYY HH12:MI PM` date format as shown in the second example described earlier.

- b.** Select the **Required** check box if you want it to be mandatory for content contributors to provide a value for the attribute. The **Required** icon will be displayed next to the attribute when contributors add or edit an item of this type.

If you do not select this check box, content contributors do not need to provide a value for the attribute.

- c.** Clear the **Add Wizard** check box if you do not want to display the attribute on the Add Item Wizard.

For example, to make it easier for content contributors to add an item of this type, you might want to limit the number of attributes displayed on the Add Item Wizard. Contributors can provide values for the extra attributes when they edit the item.

- d.** Clear the **Edit Wizard** check box if you do not want to display the attribute on the Edit Item pages.

For example, if you want to supply a default value for an attribute, and do not want content contributors to be able to change that value, clear both the **Add Wizard** and **Edit Wizard** check boxes so that the attribute does not display in the wizards.

You could create an item type called Performance Review and add the Expiration Period attribute to it. You set a default value for the attribute, 01-JAN-2003, so that every Performance Review item added by users expires on this date. Since users do not need to know about or edit this date, you clear the **Add Wizard** and **Edit Wizard** check boxes for the attribute. When users add and edit their performance review items, they will not see the Expiration Period attribute even though it is stored for each item.

8. Click OK.

To remove attributes from the item type, select the attributes in the **Selected Attributes** list, and click the **Remove** icon.

Tip: If you intend any of the attributes that you add to include important information that you want users to see immediately, you should instruct page designers to display those attributes in the regions on their pages. See [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#)

5.2.2.2.3 Adding a Procedure Call to an Item Type

For an example of how you might use a procedure call in an item type, see:

- [Example 5-1, "Adding an HTTP Procedure Call to an Item Type"](#)
- [Example 5-2, "Adding a PL/SQL Procedure Call to an Item Type"](#)

Note: The total length of the procedure call (including any parameters) must not exceed 2000 bytes. If the item procedure has too many parameters or parameter values with a large number of characters, some of the parameters or parameter values will be excluded to ensure that the limit is not reached.

To add a procedure call to an item type:

1. Use the Navigator to browse to the item type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the item type is shared (or is one of the built-in item types), it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the item type, click the **Edit** link.
3. Click the **Procedures** tab.
4. From the **Type** list, choose whether the call is to an **HTTP** or **PL/SQL** procedure.
5. In the **Procedure Call** field, enter one of the following:
 - The URL of the HTTP procedure, including the protocol used to access it, for example:


```
http://www.mycompany.com/search/index.html
```
 - The name of the PL/SQL procedure. The procedure must already exist in the database and must be prefixed with its owning schema, for example:


```
SCOTT.MY_PROC
```

The PUBLIC user must be granted execute privileges on the procedure.

6. In the **Link Text** field, enter the text to display as a hypertext link that users can click to execute the procedure call.

This link is displayed only if the region containing the item displays the Associated Function attribute and you do not select **Display Procedure Results With Item**, or you have not specified an icon. For information about adding the Associated Function attribute to a region, see [Section 5.2.2.2.4, "Including an Item Type's Procedure Call on a Page"](#).

7. In the **Icon** field, enter the path and file name of an image to associate with this procedure call. If you specify an icon, it is used instead of the **Link Text**, however you must still enter a value in the **Link Text** field to serve as the image's rollover text.

Click **Browse** to locate the image if you are not sure of its path or file name.

8. Select **Display Procedure Results With Item** to display the results of the procedure call directly in the page instead of displaying a link for users to click. This makes the results immediately visible to users, rather than requiring them to click a link to execute the procedure call themselves.
9. If the procedure you are calling has parameters, you can pass values to those parameters using the attributes you attached to the item type in [Section 5.2.2.2.2, "Adding Attributes to an Item Type"](#).
 - a. In the **Attribute** list, choose the attribute whose values you want to pass to a parameter in the procedure.
 - b. In the **Pass As** field, enter the parameter name if it is different from the attribute name.

10. Click **Apply** to add the procedure call to the item type.

11. Click **OK**.

To remove a procedure call from the item type, click the **Delete Procedure** icon next to the procedure call in the Existing Procedure Calls section.

To edit an existing procedure call, for example, to add more parameter/attribute mappings, click the **Edit Procedure** icon next to the procedure call in the Existing Procedure Calls section. Remember to click **Apply** to save your changes.

Example 5-1 Adding an HTTP Procedure Call to an Item Type

Imagine that your portal provides movie reviews to subscribers. To customize the hundreds of movie reviews you plan to upload, you create a Movie Review item type to use for each review. Knowing that users will want to find additional information about each movie, you decide to include a link to a search engine within the review.

To include this link, you choose HTTP as the procedure type, and add the following to the Procedure Call field ([Figure 5-1](#)):

```
http://www.google.com/search
```

You include the Link Text Click here for more..., and you specify an icon to associate with the procedure. You choose not to display the procedure results with the item because you want users to click the icon to access the search.

For the search engine to return information about the appropriate movie, you need to pass it the movie title. Say your Movie Review item type includes an attribute called

Movie Title. To pass the value in this attribute to the search engine, you select it in the Attribute list (you could also use the Display Name attribute if it is used to store the title of the movie).

Finally, you need to make sure that the attribute value is sent to the correct search engine parameter. In the case of Google, the search parameter name is `q`, so you enter this name in the Pass As field (Figure 5-2).

This information is appended to the Procedure Call as follows:

```
http://www.google.com/search?q=<MovieTitle>
```

Each movie review will now include a link to a customized search based on the movie title (Figure 5-3).

When users click the specified icon, the customized search content (based on the movie title) displays (Figure 5-4). The movie title, which is the search criteria, displays at the top of the search results page.

Figure 5-1 Adding an HTTP Procedure Call to an Item Type

Figure 5-2 Passing Attribute Values to HTTP Procedure Parameters

Figure 5-3 Example Movie Review Item



Figure 5-4 Example Movie Review Procedure Call Results

Example 5-2 Adding a PL/SQL Procedure Call to an Item Type

Imagine that you have written the following procedure that displays the creator and create date of an object in an HTML table:

```
--
-- procedure display_attributes
-- created Monday 17-JUN-2002 10:35
--
create or replace
procedure display_attributes (
```

```

    p_creator in varchar2,
    p_create_date in varchar2)
as
begin
    http.p('<table><tr><td><b>Creator:</b></td>'
    || '<td>' || p_creator || '</td></tr>'
    || '<tr><td><b>Create Date:</b></td>'
    || '<td>' || p_create_date || '</td></tr>'
    || '</table>');
exception
when others then
    http.p(sqlerrm);
end;
```

You can add a call to this procedure to an item type (My Item Type) so that this information is displayed for items of that type.

First you choose PL/SQL as the *Procedure Type*, and then add the following to the *Procedure Call* field (Figure 5-5):

```
<schema>.DISPLAY_ATTRIBUTES
```

You include the link text Display Attributes, and you specify an icon to associate with the procedure.

For the procedure to return the appropriate attribute values, you need to pass it the attribute names. Your procedure includes two parameters: p_creator and p_create_date. You need to pass these two parameters information from the Creator and Create Date attributes (Figure 5-6).

Each item of type My Item Type will now include a link to run the procedure (Figure 5-7).

When users click the specified icon, the additional attributes are displayed as an HTML table (Figure 5-8).

Figure 5-5 Adding a PL/SQL Procedure Call to an Item Type

Type	PL/SQL
Procedure Call	SCOTT.DISPLAY_ATTRIBUTES

Figure 5-6 Passing Attribute Values to PL/SQL Procedure Parameters

Attribute	Creator	Pass As	p_creator
Attribute	Create Date	Pass As	p_create_date

Figure 5-7 Example My Item Type Item

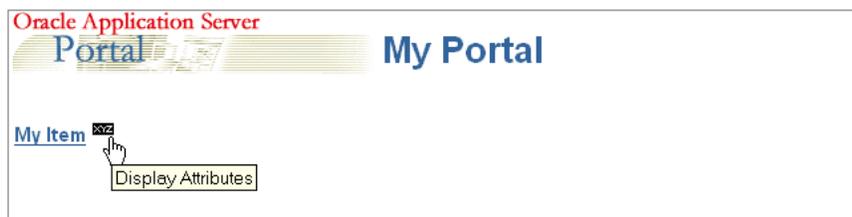


Figure 5–8 Example My Item Procedure Call Results

<p>Creator: SCOTT Create Date: 25-JUN-02</p>

5.2.2.4 Including an Item Type's Procedure Call on a Page

If an item type includes a procedure call, the link to execute the procedure call will be displayed with an item of that type only if the Associated Functions attribute is displayed in the region that contains the item.

To include an item type's procedure call on a page:

1. Go to the page to which you want to add the link.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Switch to **Edit** mode.
3. In the region to which you want to add the link, click the **Edit Region** icon.
4. Click the **Attributes/Style** tab.
5. In the **Available Attributes** list, select **Associated Function**.
6. Click the **Move** arrow.
7. Click **Apply**.
8. Click **Close**.

5.2.2.3 Making an Item Type Available to a Page Group

When you create an item type, it is not immediately available for use by content contributors. This is because you will probably want to edit the item type first to add attributes and procedure calls. When you are happy with the item type, and are ready for content contributors to start adding items of that type, you must make the item type available in the page group.

To make an item type available to a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.
By default, the Page Groups portlet is located on the Build tab of the Builder page.
2. Click the **Configure** tab.
3. In the Types and Classification section, click the **Edit** link.

Note: You can also reach the Configure Types and Classification page by clicking the **configure the list of available item types** link on the first page of the Add Item Wizard.

4. From the **Hidden Item Types** list, select the item type that you want to make available.

The **Hidden** and **Visible Item Type** lists include all the item types owned by this page group and the Shared Objects page group.

5. Click the **Move** icon to move the selected item type into the **Visible Item Types** list.

The order of item types in the **Visible Item Types** list determines the order when items in a region are grouped by item type. For information about how to group items by item type, see [Section 10.2.10, "Grouping Items in a Region"](#).

6. Click **OK** to return to the Configure tab.
7. Click **Close**.

You can also exclude an item type from a page group, meaning that content contributors cannot add items of that type to pages in the page group. For example, if you have created your own item types, you might want to exclude some of the built-in item types from the page group. To do this, select the item type in the **Visible Item Type** list and click the **Remove** icon.

5.2.2.4 Deleting an Item Type

When you delete an item type, all items of that type are also deleted. You cannot undo this action.

Take care when deleting an item type from the Shared Objects page group. Item types in the Shared Objects page group may be used across page groups. Deleting an item type from Shared Objects removes it from all page groups that use it.

Note: If you delete an item type that is one of the selected Default WebDAV Types (on the Items tab of page properties), the option that used that type (either **Default Regular Files**, **Default Zip Files**, or **Default Image Files**) is reset to **Inherit from Parent Page - [File/Zip File/File]**.

To delete an item type:

1. Use the Navigator to browse to the item type that you want to delete.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the item type is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the item type, click the **Delete** link.
3. In the confirmation page, click **Yes**.

5.2.3 Working with Page Types

Page types define the contents of a page and the information that is stored about a page. The information stored about a page is determined by the attributes of the page type.

By default, Oracle Portal includes several base page types so that page managers can get started creating pages right out of the box. Base page types include:

- **Standard**—These contain and manage items, portlets, tabs, and sub-page links.
- **URL**—These provide a route to another Web page, identified by its URL. When a user clicks the page link, the Web page referenced by the link is displayed.

- **PL/SQL**—These consist of PL/SQL code that executes when the pages are rendered.
- **JavaServer Pages (JSPs)**—These are an extension to servlet functionality that provides a simple programmatic interface to Web pages. JSPs are HTML pages with special tags and embedded Java code that is executed on the Web or application server. JSPs provide dynamic functionality to HTML pages. They are compiled into servlets when first requested, and they run in the servlet container.

For a complete list of base page types, see [Section A.3, "Base Page Types"](#).

You may find that you want to store more information about your pages than the base page types allow. If this is the case, you can create your own page types. You base your page type on one of the base page types. The page type automatically inherits all of the base page type's attributes. But, after you create your page type, you can edit it to add other attributes that are specific to your requirements. These attributes can be other default Oracle Portal attributes, or attributes that you have created yourself.

In addition to adding attributes to page types, you can also add calls to PL/SQL or HTTP procedures. You can pass attributes as parameters to those procedures if required.

5.2.3.1 Creating a Page Type

To create a page type:

1. In the Navigator, click the link for the page group in which you want to create the page type.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If you create a page type in a particular page group, that page type is available only in that page group. If you want the page type to be available in multiple page groups, either create it in the Shared Objects page group, or (if the page type already exists) promote it to the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. Click the **Page Types** link.
3. Next to Create New, click the **Page Type** link.
4. In the **Display Name** field, enter a descriptive name for the page type. The Display Name identifies the page type to other users. It is used in the Portal Navigator and Create Page **Page Type** list, so shorter display names are better. Use up to 256 characters of any kind, including spaces.
5. From the **Base Page Type** list, choose the base page type from which you want your page type to inherit attributes. You can choose from Standard, PL/SQL, or URL.
6. Click **Create**.
7. Click **Close**.

5.2.3.2 Editing a Page Type

When you first create a page type, it is exactly the same as the base page type from which you chose to inherit attributes. To truly customize the page type, you need to edit it to add more attributes, and possibly procedure calls.

Note: You cannot edit the base page types.

5.2.3.2.1 Editing the Basic Properties of a Page Type

To edit the basic properties of a page type:

1. Use the Navigator to browse to the page type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the page type is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the page type, click the **Edit** link.

This opens the Edit Page Type page, displaying the Main tab. The attributes available on the Main tab vary a little from the attributes available when you first create the page type. Notably, the Main tab includes a **Name** attribute.

3. In the **Name** field, edit the name of the page type. The name is used internally only.

The default value in the **Name** field is created from the **Display Name** provided for the page type when it was created. The **Name** is truncated to 30 characters and all spaces and special characters are discarded. For example, if the Display Name is Research & Development, the Name is ResearchDevelopment.

The **Name** is not case sensitive. It must be unique within its page group and the Shared Objects page group. Use up to 30 alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore character (_); spaces and other special characters are not allowed.

4. In the **Display Name** field, edit the descriptive name of the page type. The Display Name identifies the page type to other users. It is used in the Portal Navigator and Create Page **Page Type** list, so shorter display names are better.

Use up to 256 characters of any kind, including spaces. Changes to the page type **Display Name** are not reflected immediately on cached pages. To make the change display immediately, you must clear the page group's cache. Go to the Access tab of the page group that owns the page type, and click the **Clear Cache** link.

Any change you make here does not affect the value in the **Name** field.

5. In the **Description** field, enter information about the page type that may be useful to others, such as its arguments, functionality, or usage. The description is displayed only when editing the page type.

6. In the **Icon** field, enter the path and file name of an image to associate with the page type. Click **Browse** to locate the image if you are not sure of its path or file name. When you click **Apply** or **OK**, the file is uploaded to the Oracle Metadata Repository.

Note: This icon is not currently used within Oracle Portal. The icon may be used in future releases.

7. Click **OK**.

5.2.3.2.2 Adding Attributes to a Page Type

To add attributes to a page type:

1. Use the Navigator to browse to the page type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the page type is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the page type, click the **Edit** link.
3. Click the **Attributes** tab.
4. In the **Available Attributes** list, select the attributes that you want to add to the page type.
5. Click the **Move** icon to move the selected attributes to the **Selected Attributes** list.

The order of attributes in the **Selected Attributes** list determines the order in which the attributes are displayed when users create or edit a page of this type. Use the icons to the right of the list to change the order.

6. Click **Apply** to add the attributes to the page type.
7. When you have added the attributes, you can change their display properties if necessary:
 - a. In the **Default Value** field, enter the value to use by default for the attribute. If page managers do not specify a value for the attribute, the default value is used. You can leave this field blank if you prefer.

Multi-valued attributes are not supported for lists of values. That is, users are able to choose only one value from an attribute list of values. This means that attribute values can be displayed in combo boxes and pop-ups, but not as check boxes, drop-down lists, or radio buttons.
 - b. Select the **Required** check box if you want it to be mandatory for page managers to provide a value for the attribute. The attribute will be displayed on the first page of the Create Page Wizard, and the Main tab of the Edit Page page.

If you do not select this check box, page managers do not need to provide a value for the attribute and the attribute will be displayed on the Optional tab of the Edit Page page.

8. Click **OK**.

To remove attributes from the page type, select the attributes in the **Selected Attributes** list, and click the **Remove** icon.

5.2.3.2.3 Add a Procedure Call to a Page Type

For an example of how you might use a procedure call in a page or item type, see [Example 5-1, "Adding an HTTP Procedure Call to an Item Type"](#) or [Example 5-2, "Adding a PL/SQL Procedure Call to an Item Type"](#).

To add a procedure call to a page type:

1. Use the Navigator to browse to the page type that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the page type is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the page type, click the **Edit** link.
3. Click the **Procedures** tab.
4. From the **Type** list, choose whether the call is to an **HTTP** or **PL/SQL** procedure.
5. In the **Procedure Call** field, enter one of the following:

- The URL of the HTTP procedure, including the protocol used to access it, for example:

`http://www.oracle.com/search/index.html`

- The name of the PL/SQL procedure. The procedure must already exist in the database and must be prefixed with its owning schema, for example:

`SCOTT.MY_PROC`

The PUBLIC user must be granted execute privileges on the procedure.

6. In the **Link Text** field, enter the text to display as a hypertext link that users can click to execute the procedure call.

This link is displayed only if the page includes a Page Function item and you do not select **Display Procedure Results With Page**, or you have not specified an icon. For information about adding a Page Function item to a page, see [Section 5.2.3.2.4, "Including a Page Type's Procedure Call on a Page"](#).

7. In the **Icon** field, enter the path and file name of an image to associate with this procedure call. If you specify an icon, it is used instead of the **Link Text**, however you must still enter a value in the **Link Text** field to serve as the image's rollover text.

Click **Browse** to locate the image if you are not sure of its path or file name.

8. Select **Display Procedure Results With Page** to display the results of the procedure call directly in the page instead of displaying a link for users to click. This makes the results immediately visible to users, rather than requiring them to click a link to execute the procedure call themselves.
9. If the procedure you are calling has parameters, you can pass values to those parameters using the attributes you attached to the page type in [Section 5.2.3.2.2, "Adding Attributes to a Page Type"](#).
 - a. In the **Attribute** list, choose the attribute whose values you want to pass to a parameter in the procedure.
 - b. In the **Pass As** field, enter the parameter name if it is different from the attribute name.
10. Click **Apply** to add the procedure call to the page type.
11. Click **OK**.

To remove a procedure call from the page type, click the **Delete Procedure** icon next to the procedure call in the Existing Procedure Calls section.

To edit an existing procedure call, for example, to add more parameter/attribute mappings, click the **Edit Procedure** icon next to the procedure call in the Existing Procedure Calls section. Remember to click **Apply** to save your changes.

5.2.3.2.4 Including a Page Type's Procedure Call on a Page

If a page type includes a procedure call, the link to execute the procedure call will be displayed in a page of that type only if a Page Function item is added to the page.

To include a page type's procedure call on a page:

1. Go to the page where you want to add the Page Function item.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

2. Switch to **Edit** mode.

3. In the region where you want to add the Page Function item, click the Add Item icon.

If you do not see the Add Item icon, the region may be a portlet region, in which case, you cannot add items to this region.

4. From the **Built-In Navigation Item Types** list, choose **Page Function**.

If there are no page functions associated with the current page, this item type is not displayed. If you know there are page functions, but this item type does not appear in the list, contact your page group administrator. Your administrator selects which item types to display here.

If you do not see **Page Function** in the list, the page may not have any page functions associated with it or the Page Function item type may not have been included in the page group. For information about how to include this item type, see [Section 5.2.2.3, "Making an Item Type Available to a Page Group"](#).

5. Click **Next**.

6. From the **Page Function** list, choose the page function that you want to include in the page.

7. Click **Finish**.

5.2.3.3 Making a Page Type Available to a Page Group

When you create a page type, it is not immediately available for use by page creators. This is because you will probably want to edit the page type first to add attributes and procedure calls. When you are happy with the page type, and are ready for page creators to start creating pages of that type, you must make the page type available in the page group.

To make a page type available to a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Builder page.

2. Click the **Configure** tab.

3. In the Page Defaults section, click the **Edit** link.

Note: You can also reach the Configure Types and Classification page by clicking the **Configure** link on the first page of the Create Page Wizard.

4. From the **Hidden Page Types** list, select the page type that you want to make available.

The **Hidden** and **Visible Page Type** lists include all the base page types, and the page types owned by this page group and the Shared Objects page group.

5. Click the **Move** icon to move the selected page type into the **Visible Page Types** list.

The order of page types in the **Visible Page Types** list determines the order in which the page types are displayed in the Page Type list when creating a page.

6. Click **OK** to return to the Configure tab.

7. Click **Close**.

You can also exclude a page type from a page group, meaning that page creators cannot create pages of that type in the page group. For example, if you have created your own page types, you might want to exclude some of the base page types from the page group. To do this, select the page type in the **Visible Page Type** list and click the **Remove** icon.

5.2.3.4 Deleting a Page Type

When you delete a page type, all pages of that type and all the items in those pages are also deleted. You cannot undo this action.

Take care when deleting a page type from the Shared Objects page group. Page types in the Shared Objects page group may be used across page groups. Deleting a page type from Shared Objects removes it from all page groups that use it.

Note: You cannot delete the base page types.

To delete a page type:

1. Use the Navigator to browse to the page type that you want to delete.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the page type is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the page type, click the **Delete** link.
3. In the confirmation page, click **Yes**.

5.3 Setting Up Content Classification

It is important to classify your content in Oracle Portal as this improves its findability. By setting up an appropriate filing system and using it in a consistent way, you will help other users to find your content and allow them to determine whether it is of interest.

This section describes:

- [Section 5.3.1, "Working with Categories"](#)
- [Section 5.3.2, "Working with Perspectives"](#)

Once suitable categories and perspectives are set up for your portal, you and other users can start to classify Oracle Portal content. See, [Section 7.4, "Classifying a Page"](#) and [Section 14.4.2, "Classifying the Content of an Item"](#).

5.3.1 Working with Categories

Categories answer the question "What is this item or page?" and are used to classify content. Sales Report, Action Item, Corporate Graphic, and Location Maps are all examples of typical categories. The purpose of categories is to enable users to quickly display a listing of a particular type of content. For example, if you want users to be able to quickly access all of the company's sales reports, you could create a category called Sales Report. When a user adds an item or page to the page group, they can assign it to the Sales Report category. To find all of the available sales reports, other users can search on the Sales Report category to see a listing of pages and items that belong to that category.

For information about assigning items and pages to a category, see [Section 14.4.2, "Classifying the Content of an Item"](#) and [Section 7.4.1, "Assigning a Category to a Page"](#). For information about searching on categories, see [Section 2.2.1.2, "Performing an Advanced Search"](#).

Since categories have the potential to be quite large, you can also create a hierarchy of categories. For example, in the Sales Report category, you might want to have separate, subordinate categories for the Eastern Division, the Central Division, and the Western Division.

Note: Any user with at least the *Manage Classifications* privilege on a page group can create and manage categories.

Category Pages and Category Templates

When you create a category, a page is also created. This page lists all the items and pages that belong to the category. For example, if the items in a region are grouped by category, the name of the category is displayed as a link in the Group By banner. When users click this link, the category's page is displayed, listing all the items and pages that belong to the category.

The first time you create a category in a page group, a Portal Template (called the Category Pages Template) is also created and all category pages in the page group are based on this template. This means that if you want to change the way category pages look, you just need to edit the category pages template (rather than each individual category page). Categories are always based on the template in their owning page group. So if you move a category to the Shared Objects page group, the category page may look different if its original template and the template in the Shared Objects group are not exactly the same.

You will find the Category Pages Template in the Portal Navigator, under the Portal Templates node of the page group that owns the category. Click the **Edit** link next to the template to revise its look and feel.

The category template only controls the appearance of category pages. It does not influence how category information is displayed on the Items and Pages tabs of a category page. You can control the appearance and layout of this information, by settings options for the two Custom Search portlets that are used to return the category information.

To do this, open the category page in Edit mode, first click the **Items** tab and then the **Edit Defaults** icon, next to the search results. Editing these settings influence how

information on the Items tab is displayed. To do the same for the Pages tab, click the **Pages** tab to bring it forward and then the **Edit Defaults** icon for the portlet. See also [Section 16.3.4.3, "Customizing Search Results"](#).

Note:

- Although you can base other pages on this template, we recommend that you use it only for pages that are used for listing all objects classified under a particular category.
 - You must **not** delete category pages or templates. If you do so inadvertently your category becomes unusable. To resolve issues that relate to deleted/missing category pages or templates, see *Appendix C - Using the Category and Perspective Scripts in Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.
-

This section contains the following sub-sections:

- [Section 5.3.1.1, "Creating a Category"](#)
- [Section 5.3.1.2, "Editing a Category"](#)
- [Section 5.3.1.3, "Making a Category Available to a Page Group"](#)
- [Section 5.3.1.4, "Moving a Category to the Shared Objects Page Group"](#)
- [Section 5.3.1.5, "Deleting a Category"](#)

5.3.1.1 Creating a Category

To create a category:

1. In the Navigator, click the link for the page group in which you want to create the category.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If you create a category in a particular page group, that category is available only in that page group. If you want the category to be available in multiple page groups, either create it in the Shared Objects page group, or (if the category already exists) promote it to the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. Click the **Categories** link.
3. Next to Create New, click the **Category** link. Or, if you want to create the category under an existing category, click the **Create Sub-Category** link next to the category under which you want to create the new category.

4. In the **Display Name** field, enter a descriptive name for the category.

The Display Name identifies the category to other users. It is the name that displays on pick lists and in regions where the category attribute is exposed. Use up to 240 characters of any kind, including spaces.

5. Click **Create**.
6. Click **Close**.

When you create a category it is not immediately available for page managers and content contributors to apply to the pages and content in that page group. See [Section 5.3.1.3, "Making a Category Available to a Page Group"](#).

5.3.1.2 Editing a Category

When you create a category, not all of the available properties are available. You can edit a category after creating it to specify the rest of the available properties.

5.3.1.2.1 Editing the Basic Properties of a Category

To edit the basic properties of a category:

1. Use the Navigator to browse to the category that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the category is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the category, click the **Properties** link.

3. In the **Name** field, edit the name of the category.

This opens the Edit Category page, displaying the Main tab. The attributes available on the Main tab vary a little from the attributes available when you first create the category. Notably, the Main tab includes a **Name** attribute.

The Name attribute differs from the Display Name attribute both in the way Oracle Portal uses it and in the rules that govern which characters can be used in its formation. Oracle Portal uses the Name in path-based URLs to directly access the category. Path-based URLs take the following format:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>]/<pagegroupname>/<categoryname>
```

The default value in the Name field is taken from the Display Name provided when the category was created. The value is truncated to 60 characters and any special characters or spaces are discarded. Discarded characters include:

```
& # % \ / : * ? < > | , "
```

For example, if the Display Name is Research & Development, the Name is ResearchDevelopment.

The Name is case sensitive. It must be unique within its page group and the Shared Objects page group. Use up to 60 alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore character (_); spaces and other special characters are not allowed.

4. In the **Display Name** field, edit the descriptive name of the category.

The Display Name identifies the category to other users. It is the name that displays on pick lists and in regions where the category attribute is exposed.

Use up to 240 characters of any kind, including spaces. Changes to the category Display Name are not reflected immediately on cached pages. To make the change display immediately, you must clear the page group's cache. Go to the Access tab of the page group that owns the category, and click the **Clear Cache** link.

5. In the **Description** field, enter information about the category that may be useful to other users. The description is displayed only when editing the category.

6. Click **OK**.

5.3.1.2.2 Specifying Category Images

To specify category images:

1. Use the Navigator to browse to the category that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Note: If the category is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the category, click the **Properties** link.
3. Click the **Image** tab.
4. In the **Title Image Name** field, enter the path and file name of an image to use when the category is displayed in a list of objects item.
5. In the **Rollover Image Name** field, enter the path and file name of an image to use as a rollover image when the category is displayed in a list of objects item. The rollover image is displayed when users place their cursors over the title image.
6. In the **Banner Image Name** field, enter the path and file name of an image to display in the category page.
7. In the **Icon Name** field, enter the path and file name of an image to use when categories are displayed next to items in a region.
8. Click **OK**.

5.3.1.3 Making a Category Available to a Page Group

When you create a category in a page group it is not immediately available for page managers and content contributors to apply to the pages and content in that page group. To make the category available, you must make it visible within the page group. You can also make shared categories available in your page group. And, if you want, you can hide categories so that page managers and contributors cannot use them.

To make a category available in a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Builder page.

2. Click the **Configure** tab.
3. In the Types and Classification section, click the **Edit** link.
4. In the **Hidden Categories** list, select the category that you want to make available.

The **Hidden** and **Visible Categories** lists include all the categories owned by this page group and the Shared Objects page group.

5. Click the **Move** icon to move the selected category into the **Visible Categories** list.

The order of categories in the **Visible Categories** list determines the order used when items in a region are grouped by category.

If you want to make a sub-category visible, its parent category must also be included in the **Visible Categories** list.

6. Click **OK** to return to the Configure tab.
7. Click **Close**.

To exclude a category from a page group, select the category in the **Visible Categories** list and click the **Remove** icon. Any items that have already been assigned to that category will still be visible when users view the page, however content contributors cannot assign the category to new items.

If you hide a shared category, it is hidden only in the current page group (not in all page groups).

Even if you exclude all categories from a page group, if an item or page type includes the category attribute, the category list will still be displayed when adding or editing items or pages. The General category will be displayed in the list even though it is not included in the page group.

5.3.1.4 Moving a Category to the Shared Objects Page Group

You can move a category to the Shared Objects page group to make it visible across all page groups. If you do this, note that categories are based on the template in their owning page group, so the category page may look different if its original template and the template in the Shared Objects group are not exactly the same.

Note: Objects can be moved to the Shared Objects page group—whose default language is English—from a non-English page group only if the object already has an English translation. This applies to all promotable objects: item types, page types categories, perspectives, attributes, and styles.

To move a category to the Shared Objects page group:

1. Use the Navigator to browse to the category that you want to move.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

2. In the row for the category, click **Move to Shared**.
3. In the confirmation page, click **Yes**.

You cannot move a category to the Shared Objects page group if there is a template or page with the same name at the root level of the Shared Objects page group. Consider keeping category names unique to avoid this possibility.

5.3.1.5 Deleting a Category

When you delete a category, any item or page that is assigned to that category is reassigned to the General category. If the category includes sub-categories, those sub-categories will also be deleted.

Take care when deleting a category from the Shared Objects page group. Categories in the Shared Objects page group may be used across page groups. Deleting a category from Shared Objects removes it from all page groups that use it.

Deleting a Single Category

To delete a single category:

1. Use the Navigator to browse to the category that you want to delete.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the category is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the category, click the **Delete** link.
3. In the confirmation page, click **Yes**.

Deleting Multiple Categories

To delete multiple categories:

1. In the Navigator, click the link for the page group that owns the categories that you want to delete.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the categories are shared, they will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. Click the **Categories** link.
3. Click the **actions** link.
4. Select the check boxes next to the categories that you want to delete.

To delete all the categories in the page group, select the check box in the header row.

5. Click **Delete**.
6. In the confirmation page, click **OK**.

5.3.2 Working with Perspectives

Perspectives are used to further classify content by a cross-category grouping. Perspectives often answer the question "Who will be interested in this item?" A human resources page group might have perspectives such as All Employees, Design Analysts, Quality Assurance Engineers, and Sales Representatives. A travel agency page group might have perspectives such as Inexpensive Vacations, Moderately Priced Vacations, and Luxury Vacations. The purpose of perspectives is to enable users to quickly display a listing of content that is pertinent to them. For example, if you want some users to be able to quickly access all of the content that relates to being a sales representative (such as sales reports, contact management applications, and calendaring services), you could create a perspective called Sales Representatives. When a user adds an item to the page group, they can assign it to this and other perspectives. To find all of the available content, other users can then search on this perspective to see a listing of the items that are part of it.

For information about assigning items to perspectives, see [Section 14.4.2, "Classifying the Content of an Item"](#). For information about searching on categories, see [Section 2.2.1.2, "Performing an Advanced Search"](#).

Unlike categories, users can choose more than one perspective for an item. For example, a sales report might belong to both the Sales Representatives and Marketing Managers perspectives.

Since perspectives have the potential to be quite large, you can also create a hierarchy of perspectives. For example, in the Sales Representatives perspective, you might want to have separate subordinate perspectives for sales representatives in the eastern division, the central division, and the western division.

Note: Any user with at least the *Manage Classifications* privilege on a page group can create and manage perspectives.

Perspective Pages and Perspective Templates

When you create a perspective, a page is also created. This page lists all the items and pages that belong to the perspective. For example, regions can be set up to display perspectives. When users click a perspective, that perspective's page is displayed, listing all the items and pages that belong to the perspective.

The first time you create a perspective in a page group, a Portal template is also created (called the Perspective Pages Template) and all perspective pages in the page group are based on this template. This means that if you want to change the way perspective pages look, you just need to edit the perspective pages template (rather than each individual perspective page). Perspectives are always based on the template in their owning page group. So if you move a perspective to the Shared Objects page group, the perspective page may look different if its original template and the template in the Shared Objects group are not exactly the same.

You will find the Perspective Pages Template in the Portal Navigator, under the Portal Templates node of the page group that owns the perspective. Click the **Edit** link next to the template to revise its look and feel.

The perspective template only controls the appearance of perspective pages. It does not influence how perspective information is displayed on the Items and Pages tabs of a perspective page. You can control the appearance and layout of this information, by settings options for the two Custom Search portlets that are used to return the perspective information.

To do this, open the perspective page in Edit mode, first click the **Items** tab and then the **Edit Defaults** icon, next to the search results. Editing these settings influence how information on the Items tab is displayed. To do the same for the Pages tab, click the **Pages** tab to bring it forward and then the **Edit Defaults** icon for the portlet.

Note:

- Although you can base other pages on this template, we recommend that you use it only for pages that are used for listing all objects classified under a particular perspective.
 - You must **not** delete perspective pages or templates. If you do so inadvertently your perspective becomes unusable. To resolve issues that relate to deleted/missing perspective pages or templates, see *Appendix C - Using the Category and Perspective Scripts in Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.
-

This section contains the following sub-sections:

- [Section 5.3.2.1, "Creating a Perspective"](#)
- [Section 5.3.2.2, "Editing a Perspective"](#)

- [Section 5.3.2.3, "Making a Perspective Available to a Page Group"](#)
- [Section 5.3.2.4, "Moving a Perspective to the Shared Objects Page Group"](#)
- [Section 5.3.2.5, "Deleting a Perspective"](#)

5.3.2.1 Creating a Perspective

To create a perspective:

1. In the Navigator, click the link for the page group in which you want to create the perspective.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If you create a perspective in a particular page group, that perspective is available only in that page group. If you want the perspective to be available in multiple page groups, either create it in the Shared Objects page group, or (if the perspective already exists) promote it to the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. Click the **Perspectives** link.
3. Next to Create New, click the **Perspective** link. Or, if you want to create the perspective under an existing perspective, click the **Create Sub-Perspective** link next to the perspective under which you want to create the new perspective.
4. In the **Display Name** field, enter a descriptive name for the perspective.

The Display Name identifies the perspective to other users. It is the name that displays on pick lists and in regions where the perspective attribute is exposed. Use up to 240 characters of any kind, including spaces.

5. Click **Create**.
6. Click **Close**.

When you create a perspective it is not immediately available for page managers and content contributors to apply to the pages and content in that page group. See [Section 5.3.2.3, "Making a Perspective Available to a Page Group"](#).

5.3.2.2 Editing a Perspective

When you create a perspective, not all of the available properties are available. You can edit a perspective after creating it to specify the rest of the available properties.

5.3.2.2.1 Edit the Basic Properties of a Perspective

To edit the basic properties of a perspective:

1. Use the Navigator to browse to the perspective that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the perspective is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the perspective, click the **Properties** link.
3. In the **Name** field, edit the name of the perspective.

This opens the Edit Perspective page, displaying the Main tab. The attributes available on the Main tab vary a little from the attributes available when you first create the perspective. Notably, the Main tab includes a **Name** attribute.

The Name attribute differs from the Display Name attribute both in the way Oracle Portal uses it and in the rules that govern which characters can be used in its formation. Oracle Portal uses the Name in path-based URLs to directly access the perspective. Path-based URLs take the following format:

```
Http://<host>:<port>/portal/page/<dad>[/lang-<language>]/<pagegroupname>/<perspective>
```

The default value in the Name field is taken from the Display Name provided when the perspective was created. The value is truncated to 60 characters and any special characters or spaces are discarded. Discarded characters include:

& # % \ / : * ? < > | , "

For example, if the Display Name is Research & Development, the Name is ResearchDevelopment.

The Name is case sensitive. It must be unique within its page group and the Shared Objects page group. Use up to 60 alphanumeric characters (A to Z, a to z, 0 to 9) and the underscore character (_); spaces and other special characters are not allowed.

4. In the **Display Name** field, edit the descriptive name of the perspective.

The Display Name identifies the perspective to other users. It is the name that displays on pick lists and in regions where the perspective attribute is exposed.

Use up to 240 characters of any kind, including spaces. Changes to the perspective Display Name are not reflected immediately on cached pages. To make the change display immediately, you must clear the page group's cache. Go to the Access tab of the page group that owns the category, and click the **Clear Cache** link.

5. In the **Description** field, enter information about the perspective that may be useful to other users. The description is displayed only when editing the category.
6. Select the **Display Icon With Items** check box if you want to display an image rather than the display name when the perspective is displayed next to items in a region (Figure 5–9):

If you select this check box you should also specify an Icon image for the perspective. If you do not specify an Icon image, the display name is displayed even if this check box is selected.

7. Click **OK**.

Figure 5–9 Items Displayed with Perspective Icons



5.3.2.2.2 Specifying Perspective Images

To specify perspective images:

1. Use the Navigator to browse to the perspective that you want to edit.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the perspective is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the perspective, click the **Properties** link.
3. Click the **Image** tab.
4. In the **Title Image Name** field, enter the path and file name of an image to use when the perspective is displayed in a list of objects item.
5. In the **Rollover Image Name** field, enter the path and file name of an image to use as a rollover image when the perspective is displayed in a list of objects item. The rollover image is displayed when users place their cursors over the title image.
6. In the **Banner Image Name** field, enter the path and file name of an image to display in the perspective page.
7. In the **Icon Name** field, enter the path and file name of an image to use when perspectives are displayed next to items in a region.
8. Click **OK**.

5.3.2.3 Making a Perspective Available to a Page Group

When you create a perspective in a page group it is not immediately available for content contributors to apply to the items in that page group. To make the perspective available, you must make it visible within the page group. You can also make shared perspectives available in your page group. And, if you want, you can hide perspectives so that contributors cannot use them.

To make a perspective available to a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Builder page.

2. Click the **Configure** tab.
3. In the Types and Classification section, click the **Edit** link.
4. In the **Hidden Perspectives** list, select the perspective that you want to make available.

The **Hidden** and **Visible Perspectives** lists include all the perspectives owned by this page group and the Shared Objects page group.

5. Click the **Move** icon to move the selected perspective into the **Visible Perspectives** list.

The order of perspectives in the **Visible Perspectives** list determines the order in which the perspectives are listed when adding or editing a page or item.

If you want to make a sub perspective visible, its parent perspective must also be included in the **Visible Perspectives** list.

6. Click **OK** to return to the Configure tab.
7. Click **Close**.

To exclude a perspective from a page group, select the perspective in the **Visible Perspectives** list and click the **Remove** icon.

If you hide a shared perspective, it is hidden only in the current page group (not in all page groups).

5.3.2.4 Moving a Perspective to the Shared Objects Page Group

You can move a perspective to the Shared Objects page group to make it visible across all page groups. If you do this, note that perspectives are based on the template in their owning page group, so the perspective page may look different if its original template and the template in the Shared Objects group are not exactly the same.

Note: Objects can be moved to the Shared Objects page group—whose default language is English—from a non-English page group only if the object already has an English translation. This applies to all promotable objects: item types, page types, categories, perspectives, attributes, and styles.

To move a perspective to the Shared Objects page group:

1. Use the Navigator to browse to the perspective that you want to move.
To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.
2. In the row for the perspective, click **Move to Shared**.
3. In the confirmation page, click **Yes**.

You cannot move a perspective to the Shared Objects page group if there is a template or page with the same name at the root level of the Shared Objects page group. Consider keeping perspective names unique to avoid this possibility.

5.3.2.5 Deleting a Perspective

When you delete a perspective, if the perspective includes sub-perspectives, those sub-perspectives will also be deleted.

Take care when deleting a perspective from the Shared Objects page group. Perspectives in the Shared Objects page group may be used across page groups. Deleting a perspective from Shared Objects removes it from all page groups that use it.

Deleting a Single Perspective:

To delete a single perspective:

1. Use the Navigator to browse to the perspective that you want to delete.
To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the perspective is shared, it will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. In the row for the perspective, click the **Delete** link.
3. In the confirmation page, click **Yes**.

Deleting Multiple Perspectives

To delete multiple perspectives:

1. In the Navigator, click the link for the page group that owns the perspectives that you want to delete.

To get to the Navigator click the Navigator link on any page. By default you can find a Navigator link on the Portal Builder page.

Tip: If the perspectives are shared, they will be in the Shared Objects page group. See [Section 4.6, "Sharing Objects Across Page Groups"](#)

2. Click the **Perspectives** link.
3. Click the **actions** link.
4. Select the check boxes next to the perspectives that you want to delete.

To delete all the perspectives in the page group, select the check box in the header row.

5. Click **Delete**.
6. In the confirmation page, click **OK**.

5.4 Setting Up Approvals

Oracle Portal enables you to manage and control the publishing of content on your portal through the use of approvals. Oracle Portal provides a special privilege for approvals, *Manage Items With Approval*. Each item added or modified by a user with this privilege must be approved before it is published to the portal. This enables you to delegate the creation of portal content without relinquishing control over what is actually displayed to your users, or compromising the quality of the content.

For example, you may want each of your company's product whitepapers to be reviewed by your legal department before they are published. Using approvals, you can easily establish an approval process that includes the legal department as one of the required approvers. This ensures that each author of a whitepaper cannot publish their documents to the portal until they have been checked by the legal department.

Approval processes can also reduce or even eliminate the costs of a paper-driven office in which hard copy documents requiring approvals, such as expense reports and travel requests, create bottlenecks for your workers. When you define approval processes, you allow the appropriate people in your organization to receive notification of pending items requiring approval, to review the items, and to approve or reject the items, all from your company's portal.

Oracle Portal offers two different methods for defining approval processes: Oracle Portal approval processes and Oracle BPEL workflow processes.

- An Oracle Portal approval process is an approval process created within Oracle Portal itself. You specify the approvers on the Approval tab of the page group or page. Oracle Portal approval processes offer a simple, easy to use, self-contained way of implementing approvals.
- An Oracle BPEL workflow process is created using Oracle BPEL Designer. In Oracle Portal, the portal administrator then creates a process definition that maps to the Oracle BPEL workflow process. Using Oracle BPEL workflow processes provides functionality beyond that provided by Oracle Portal approval processes, such as escalation and suspension.

This section contains the following sub-sections:

- [Section 5.4.1, "Enabling Oracle BPEL Approval Processes"](#)

- [Section 5.4.2, "Enabling Approvals and Notifications for a Page Group"](#)
- [Section 5.4.3, "Setting Up an Approval Process for a Page Group"](#)
- [Section 5.4.4, "Monitoring Pending Approvals"](#)
- [Section 5.4.5, "Enabling Draft Items"](#)
- [Section 5.4.6, "Setting Up Expiry Notifications for a Page Group"](#)

5.4.1 Enabling Oracle BPEL Approval Processes

If you plan to use Oracle BPEL to manage approvals in your page group, you first need to enable the Content Management Event Framework (CMEF). Oracle BPEL Process Manager uses CMEF to communicate with Oracle Portal. This option is enabled by default.

To enable CMEF for a page group:

1. From the Portal Navigator page, choose the page group to be edited.
2. Select the **Properties** link next to your page group.
3. Click the **Configure** tab.
4. In the Content Management Event Framework Section, click the **Edit** link.
5. Select the **Enable Content Management Event Framework** check box.
6. Click **OK** to return to the Configure tab.
7. Click **Close**.

5.4.2 Enabling Approvals and Notifications for a Page Group

You can enable approval processes at *page group* and *page level*. This means you can establish one approval process for the entire page group, or approval processes that are unique to individual pages.

Note: You cannot override the *type* of approval process at page level. That is, you cannot use an Oracle BPEL process at the page group level and an Oracle Portal process at the page level.

This section describes how to enable approvals for a page group. By default, pages inherit the approval process defined for the page group to which they belong but you can allow page manager to override this if you wish. See [Section 5.4.2.1, "Enabling Page Managers to Specify Their Own Approval Processes"](#).

Note: If you enable Approvals and Notifications, make sure that none of the pages in the page group are cached at the system level. See also [Section 21.1, "Page Caching"](#).

1. From the Portal Navigator page, choose the page group to be edited.
2. Select the **Properties** link next to your page group.
3. Click the **Configure** tab.
4. In the Approvals and Notifications section, click the **Edit** link.
5. Select the **Enable Approvals and Notifications** check box.

This enables approvals for the page group. The page group administrator can now set up an approval routing process for the page group. See [Section 5.4.3, "Setting Up an Approval Process for a Page Group"](#).

6. If you want to set up the approval process within Oracle Portal, select **Use Portal Workflow**.

If you want to use Oracle BPEL to set up your approval processes, select **Use BPEL Workflow**.

Note: The Use BPEL Workflow radio button will be enabled, after you complete the BPEL synchronization with Portal. For more information see the Portal Adm.....

7. Click **OK** to return to the Configure tab.
8. Click **Close**.

5.4.2.1 Enabling Page Managers to Specify Their Own Approval Processes

To enable page managers to specify their own approval processes:

1. From the Portal Navigator page, choose the page group to be edited.
2. Select the **Properties** link next to your page group.
3. Click the **Configure** tab.
4. In the Approvals and Notifications section, click the **Edit** link.
5. Select the **Allow Page to Override the Page Group Approval Process** check box.
6. Click **OK** to return to the Configure tab.
7. Click **Close**.

Enabling this option also allows page managers to ignore the approval process completely by defining an empty approval process at the page level. This means that users with the *Manage Items With Approval* privilege on the page will be able to add items to the page without requiring approval.

For information about how to set up an approval process for a page, see [Section 20.1, "Setting Up an Approval Process for a Page"](#).

5.4.3 Setting Up an Approval Process for a Page Group

An approval process is a series of one or more approval routing steps. Each routing step includes one or more users, or groups (approvers), or both, who must approve an item before it is published. Routing to the approvers can be in serial (one at a time) or in parallel (all at once). Each step can be defined to require a response by any one approver or by all approvers.

The approval process begins when a user with the *Manage Items With Approval* privilege adds or modifies an item on a page. The item is automatically checked out of the portal (so that it cannot be modified), and routed through the approval process. Each approver is notified through the Notification or My Worklist portlet that an item requires his or her approval. Once the required number of responses is received during a step, the process continues to the next step. The approval process ends when the final step is reached and the document is approved by the last required approver. The approval process also ends when any approver rejects the item.

You can specify that users can add draft versions of an item without immediate approval. Draft items are only visible to the item owner, who can submit the item for approval, once it is finalized. See [Section 2.7.1.1.3, "Submitting a Draft Item for Approval"](#).

The approval process can also be extended to *all* users contributing content to the page group, instead of just those with the *Manage Items With Approval* privilege.

You can create one approval process for the entire page group, or you can enable page designers to establish or specify approval processes that are unique to individual pages (or even to ignore the approval process for a particular page). Using Oracle BPEL, you can even establish corporate-wide approval processes. The steps for setting up an approval process for a page group are described in the next two sections. For information about how to set up an approval process for a page, see [Section 20.1, "Setting Up an Approval Process for a Page"](#).

5.4.3.1 Setting Up an Oracle Portal Approval Process for a Page Group

To set up an Oracle Portal approval process for a page group:

1. From the Portal Navigator page, choose the page group to be edited.
2. Select the **Properties** link next to your page group.
3. Click the **Approval** tab.
4. In the **Approvers** field in the Approval Routing List section, select one or more approvers (users or groups) for the first step of the approval routing list. Click the **Browse Users** icon to add a user, or the **Browse Groups** icon to add a group. If you type in user and group names manually, check spellings carefully to avoid invalid entries.

The Approval Routing List section is available only if Allow Page to Override the Page Group Approval Process have been enabled for the page group. See [Section 5.4.2.1, "Enabling Page Managers to Specify Their Own Approval Processes"](#).

Each step of the approval process can include both users and groups. Use a semicolon (;) as the separator between multiple users and groups.

Do not use the same approver in more than one step. Any additional times the approver is listed, he or she will be skipped.

When you include a group in the approval routing list, any one member of the group can approve or reject an item, even if the step specifies that *all* of the recipients must respond. If you require responses from all members of a group, list each member individually.

We recommend that approvers have at least the *View* privilege on the page that includes the item to be approved (so that they can view the page).

Oracle Portal includes the following special approvers:

- **#PAGE_GROUP_MANAGER#**: Any user or group with the *Manage All* privilege on the page group, or the *Manage All* global privilege on all page groups.
- **#PAGE_MANAGER#**: Any user or group with the *Manage* privilege on the page.
- **#CONTENT_MANAGER#**: Any user or group with *Manage Content* or *Manage* privilege on the page, or the higher-level *Manage* privilege, on the page.

By default, when you enable approvals and notifications for the page group, a single step approval process is defined at the page group level with #CONTENT_MANAGER# as the default approver.

When you enter these special approvers, use uppercase text only.

5. In the **Routing Method for Approvers** radio group, choose a routing method for the approval routing list:
 - **One at a time, all must approve (Serial, All)**—This sends the approval to approvers in the step one at a time in the sequence specified. All of the approvers must respond to the approval.
 - **All at the same time, all must approve (Parallel, All)**—This sends the approval to approvers in the step all at the same time. All of the approvers must respond to the approval.
 - **All at the same time, only one must approve (Parallel, Any)**—This sends the approval to approvers in the step all at the same time. Only one of the approvers must respond to the approval.

6. Click **Add Step** to continue adding steps to the approval routing list.

For each step, select approvers and a routing method. Each step you add is listed in the Approval Process section. You can edit existing steps by clicking the list of users and groups, or the **Edit** icon. When you edit a step, the step details are displayed in the Approval Routing List section and the **Add Step** button changes to **Update Step**.

Because Oracle Internet Directory can include multiple directory containers that can use the same group names, the distinguished name (DN) is displayed next to any group that does not belong to the local Oracle Portal instance.

7. If you do not want to allow content contributors to upload draft items without approval, make sure the **Enable Item Drafts** option is not selected. For more information about draft items, see [Section 5.4.5, "Enabling Draft Items"](#).
8. Select **All Users Require Approval** if *every* content contributor requires approval.

By default, this option is not selected which means that only users with the *Manage Items With Approval* privilege require approval.
9. Click **OK** when the approval routing list is complete.

If there is an active approval process pending for an item, the approval routing steps for the item cannot be reordered. Also, you cannot edit active steps (that is, any step which is currently active within an approval process). However, you can still delete and edit any steps which are not currently active.

5.4.3.2 Specifying an Oracle BPEL Workflow Process for a Page Group

Note: Before you can specify an Oracle BPEL workflow process for a page group the process must first be created and deployed using Oracle BPEL Designer and then the portal administrator must create a process definition for that process. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

To specify an Oracle BPEL workflow process to use for a page group:

1. From the Portal Navigator page, choose the page group to be edited.

2. Select the **Properties** link next to your page group.

3. Click the **Approval** tab.

The Approval tab is available only if approvals and notifications have been enabled for the page group. See [Section 5.4, "Setting Up Approvals"](#).

4. From the **BPEL Process User** list, choose the portal user to associate with the Oracle BPEL process. This user must have *Manage All* privileges on the page group and will typically be the page group administrator. The user does not have to be a user that is part of the Oracle BPEL workflow process.
5. From the **Process Name** list, choose the Oracle BPEL process definition that you want to use for this page group. Use the description, if one exists, to help you decide if this is the process that you want to use.

The process definitions must have already been created by the portal administrator. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

6. From the **Access Users** list, select the users that you want to add as approvers for the BPEL workflow process and click the right arrow to move them to the **Workflow Approvers** list.

Any user with *Manage All* privileges on the page group can be selected as an approver.

The users included in the **Workflow Approvers** list are passed to the BPEL process in the order they appear here.

7. From the **BPEL Process Group Mapping** list, select the group that you want to map to the BPEL workflow process and click the right arrow to move them to the **Workflow Approvers** list.

The group included in the **Workflow Approvers** list are passed to the BPEL process in the order they appear here.

8. If you do not want to allow content contributors to upload draft items without approval, make sure the **Enable Item Drafts** check box is not selected. For more information about draft items, see [Section 5.4.5, "Enabling Draft Items"](#).

9. Select **Require Approval for All Users** check box if every content contributor requires approval.

By default, this options is not selected which means that only users with the *Manage Items With Approval* privilege require approval.

10. Click OK.

5.4.4 Monitoring Pending Approvals

The Pending Approvals Monitor portlet enables you to list pending approvals in the page groups that you administer. You can list the pending approvals by approver, date, page group, or submitter.

Figure 5–10 The Pending Approvals Monitor Portlet



The Pending Approvals Monitor portlet only lists pending approvals for other users. If you would like to view your own pending approvals, use the My Notifications portlet or My Worklist portlet. For information about these portlets or approving or rejecting items that require your approval, see [Section 2.7.2, "Approving or Rejecting Content"](#).

To monitor pending approvals:

1. Go to the page that contains your Pending Approvals Monitor portlet.
2. In the first list, choose how you want to view the pending approvals that you want to monitor. You can view pending approvals by approver, date, page group, or submitter.
3. In the second list and third lists, choose the operator and value to use to filter the list of pending approvals.

Wildcard searches using % or * are not supported. To view pending approvals by approver, page group, or submitter, enter a valid name. Otherwise, enter a valid date.

4. Click **Go**.

You can also personalize or edit the defaults of the portlet to automatically list pending approvals.

Examples of the Pending Approvals Monitor Portlet

Figure 5–11 List Pending Approvals Waiting to Be Approved by SCOTT

The screenshot shows the 'Pending Approvals Monitor' portlet. The search criteria are: 'Show Approvals For' set to 'Approver', the operator is 'Is', and the value is 'SCOTT'. A 'Go' button is visible on the right.

Figure 5–12 List Pending Approvals Submitted After 11-NOV-2004

The screenshot shows the 'Pending Approvals Monitor' portlet. The search criteria are: 'Show Approvals For' set to 'Date', the operator is 'Greater than', and the value is '11-11-2004'. Below the value field, the format '(DD-MON-YYYY)' is displayed. A 'Go' button is visible on the right.

Figure 5–13 List Pending Approvals for Items That Were Submitted by Any User Other Than SCOTT

The screenshot shows the 'Pending Approvals Monitor' portlet. The search criteria are: 'Show Approvals For' set to 'Submitter', the operator is 'Is not', and the value is 'SCOTT'. A 'Go' button is visible on the right.

5.4.5 Enabling Draft Items

You can upload draft items to the portal. With the draft feature enabled, content developers can upload content to the portal without exposing it until they're ready to submit it for approval. Approvals must be enabled for the draft feature to be implemented (see [Section 5.4.2, "Enabling Approvals and Notifications for a Page Group"](#)). Drafts do not require approval, so content developers can upload drafts to

the portal and continue to work on them without having to wait for approval. Drafts are not displayed when the page is viewed. When the draft is finalized and the contributor submits it for approval, it is routed through the approval process (if one is defined). See [Section 2.7.1.1.3, "Submitting a Draft Item for Approval"](#). Keep in mind that, once enabled, this option cannot be disabled until all draft items are submitted for approval.

It is possible for approvals to be enabled without there being any defined approval process. Consequently, it is possible to enable drafts for everyone without ultimately requiring that their finalized content be approved. Keep in mind, however, if you have users with the *Manage Items with Approval* page group privilege, and no approval process is defined, this privilege is equivalent to the *Manage Content (items)* page group privilege. In other words, such users will be able to add content that has not been through an approval process.

To enable draft items:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Group portlet is located on the Build tab of the Builder page.

2. Click the **Configure** link.
3. Click the **Approval** tab.

The Approval tab is available only if approvals and notifications have been enabled for the page group. See [Section 5.4, "Setting Up Approvals"](#).

4. Select **Enable Item Drafts** to enable users to add draft versions of items to pages in the page group.

Draft items are visible only to the item owner in the Pending Items Preview and List editing views. Once the draft is finalized, the user can submit the item for approval from the **Actions** page. Once enabled, this option cannot be disabled until all draft items in this page group are submitted for approval.

5. Click **OK**.

5.4.6 Setting Up Expiry Notifications for a Page Group

Expiry notifications notify one or more recipients (users or groups) when an item in the page group is about to expire.

5.4.6.1 Setting Up Expiry Notifications

To set up expiry notifications for a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Group portlet is located on the Build tab of the Builder page.

2. Click the **Approval** tab.

The Approval tab is available only if approvals and notifications have been enabled for the page group. See [Section 5.4, "Setting Up Approvals"](#).

3. In the **Recipients** field in the Expiry Notifications section, select one or more recipients (users or groups) to notify when an item in the page group is about to expire. Click the **Browse Users** icon to notify a user, or the **Browse Groups** icon to notify a group.

Use a semicolon (;) as the separator between multiple users and groups. This field can include both users and groups.

Oracle Portal includes the following special recipients:

- **#PAGE_GROUP_MANAGER#**: Any user or group with the *Manage All* privilege on the page group, or the *Manage All* global privilege on all page groups.
- **#PAGE_MANAGER#**: Any user or group with the *Manage* privilege on the page.
- **#CONTENT_MANAGER#**: Any user or group with *Manage Content* or *Manage* privilege, or the higher-level *Manage* privilege, on the page.

By default, when you enable approvals and notifications for the page group, a single step approval process is defined at the page group level with **#CONTENT_MANAGER#** as the default approver.

- **#ITEM_OWNER#**: The owner of the item.

When you enter these special approvers, use uppercase text only.

Because Oracle Internet Directory can include multiple directory containers that can use the same group names, the distinguished name (DN) is displayed next to any group that does not belong to the local Oracle Portal instance.

4. In the **Notification Time for Recipients** field, enter how long (in hours) before the item is due to expire to notify the recipients. The default is 48 hours.
5. Click **OK**.

If a user or group is deleted from the portal, any pending items requiring that user or group's approval will need to be approved or rejected by the page owner or page group administrator. In the approval step, a deleted user is listed as 'User no longer exists.'

5.4.6.2 Displaying Expiry Notifications on a Page

To display expiry notifications on a page:

1. Go to the page where you want to display expiry notifications.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

2. Switch to **Edit** mode.
3. In the region where you want to display expiry notifications, click the **Add Portlets** icon.

If you do not see the **Add Portlets** icon, the region may be an item region, in which case, you cannot add portlets to this region.

4. Click the link for the **My Notifications** portlet.

By default, the My Notifications portlet is located under the Portal Content Tools page of the Portlet Repository. If you cannot find the My Notifications portlet under this page, use the Search field.

5. Click **OK**.
6. Next to the portlet, click the **Actions** icon.
7. Click **Edit Defaults**.

8. In the **Display Name** field, enter a different title for the portlet if required. For example, if the portlet will be used only to display expiry notifications, you might change the display name to Items About to Expire.
9. In the **Display Limit** radio group, select whether to display all notifications or limit the portlet to display only a specified number of notifications.
10. Make sure the **Show Expiry Notifications** check box is selected.
The portlet can also display approval and subscription notifications.
11. Select the **Display Notification Type Icon in Portlet** check box if you want to display an icon to illustrate whether the notification is an approval, expiry, or subscription notification. This is useful if you intend to use the portlet to display other types of notifications.
12. Select the **Display Notification Status in Portlet** check box if you want to display the status of the notification in the portlet. This informs users whether the item is about to expire or has already expired.
13. In the **Page Group Option** radio group, select whether to display expiry notifications for all page group or a specified selection of page groups.
This option is more useful for individual users who can personalize the portlet to filter the list to include only those expiry notifications that they are actually interested in.
14. In the **User Group Option** radio group, select whether to display expiry notifications for all user groups or a specified selection of user groups.
This option is more useful for individual users who can personalize the portlet to filter the list to include only those expiry notifications that they are actually interested in.
Use a semicolon (;) as the separator between multiple groups.
Because Oracle Internet Directory can include multiple containers that can use the same group names, the distinguished name (DN) is displayed next to any group that does not belong to the local Portal instance.
15. Click OK.

5.5 Managing Item Behavior at the Page Group Level

This section contains the following sub-sections:

- [Section 5.5.1, "Changing the Page Group Quota"](#)
- [Section 5.5.2, "Setting the Item Versioning Level for a Page Group"](#)
- [Section 5.5.3, "Managing Unpublished Items"](#)
- [Section 5.5.4, "Displaying the New and Updated Icons"](#)
- [Section 5.5.5, "Disabling the Rich Text Editor"](#)

Intended Audience

The contents of this section are intended for users with at least the *Manage All* privilege on a page group (that is, page group administrators).

5.5.1 Changing the Page Group Quota

You can limit the amount of space provided in your page group to store uploaded documents.

To change the page group quota:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. In the **Total document storage quota** radio group, select **Limit to** to limit the amount of space provided to store uploaded documents.
3. In the field, enter the maximum amount of space (in megabytes) to provide for uploaded documents in the page group.

When this limit is reached, users will no longer be able to upload documents to the page group.

Select **No limit** if you do not want to impose a limit for uploaded documents.

4. Click **OK**.

5.5.2 Setting the Item Versioning Level for a Page Group

Oracle Portal lets you select the level of item versioning you want to use for items in a page group. Item versioning determines what happens to the old version of an item when a new version is added.

Page managers can override the item versioning level for the page. However, they can only provide a higher level of item versioning than the page group, not a lower level. For example, if you set item versioning for a page group to Simple, then page managers can set the item versioning for pages within the page group to Audit, but not to None. See [Section 7.1, "Enabling Item Versioning for Page Groups, Pages, and Templates"](#).

To set the item versioning level for a page group:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Click the **Items** tab.
3. In the **Item Versioning** radio group, select:
 - **None** to completely replace the item's previous version when editing an item. If you choose this option, none of the item's previous versions are retained in the database.
 - **Simple** to offer the content contributor a choice of completely replacing the item's previous version or creating a new version when editing an item. If the contributor chooses the latter option, all the item's previous versions are retained in the portal's repository.
 - **Audit** to always create a new version when editing an item. If you choose this option, all the item's previous versions are retained in the portal's repository.

4. Click **OK**.

5.5.3 Managing Unpublished Items

You can display unpublished items in Edit mode of the pages of a page group. Unpublished items are items that have a future publish date, have expired, or have been deleted.

Only users with at least the *Manage Content* privilege on the page (or the *Manage Item* privilege on the item if item level security is enabled) can see unpublished items in Edit mode. Users with the *Manage Content* privilege on a page can edit, move, or restore unpublished items in that page.

5.5.3.1 Displaying Unpublished Items

To display unpublished items:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Click the **Items** tab.
3. Select **Display Unpublished Items In Edit Mode**.
4. Click **OK**.

5.5.3.2 Retaining Deleted Items

To be able to continue to display deleted items, you must first choose to retain them in the Oracle Metadata Repository.

Note: This setting does not apply to draft items. If a draft item is deleted it is irrevocably deleted from the portal. The only way to restore the item is to add it to the page once again.

To retain deleted items in the Oracle Metadata Repository:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Click the **Items** tab.
3. Select **Retain Deleted Items**.
4. Click **OK**.

5.5.3.3 Permanently Removing Expired and Deleted Items

Periodically, you may want to perform a system purge to permanently remove expired and deleted items from the Oracle Metadata Repository.

To permanently remove expired and deleted items:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Click the **Items** tab.
 3. Select **Purge Deleted Items** to remove deleted items during the system purge.
 4. Select **Purge Expired Items** to remove expired items during the system purge.
 5. Click **Purge**.
 6. When the page refreshes, the purge is complete, and you can click **OK**.
- A system purge may take a few minutes if there are a lot of expired or deleted items.

5.5.4 Displaying the New and Updated Icons

If a region includes the *New Item Indicator*, when a user adds a new item or portlet to that region, the **New** icon is displayed next to it to inform other users that it is new and may contain information they haven't yet seen.

If a region includes the *Updated Item Indicator*, when a user edits an existing item or portlet in that region, the **Updated** icon is displayed next to it, to inform other users that it has been updated and may contain new information.

You can control how long an item or portlet is considered new or recently updated by changing the display period of these icons.

Changing the New and Updated Icon Display Period

To change the New and Updated icon display period:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
2. Click the **Items** tab.
3. In the **Icon Display Period** field, enter the number of days to display the **New** and **Updated** icons.

If you set the icon display period to 0, the icons will not be displayed at all.

The display period applies to both the **New** and **Updated** icons. You cannot set a different display period for the individual icons.

4. Click **OK**.

Note: When you change the icon display period, if a page has been cached, the new setting may not be immediately apparent. To make sure that the icons are displayed immediately, clear the cache for the page group. To do this click the **Access** tab, then click the **Clear Cache** link.

Adding the New or Updated Item Indicator to a Region

To add the New or Updated Item Indicator to a region:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.
2. Select the page to which you want to add the New or Updated Item Indicator, then click **Edit**.
3. In the region to which you want to add the indicator, click the **Edit Region** icon.

4. Click the **Attributes/Style** tab.
5. In the **Available Attributes** list, select:
 - **New Item Indicator** if you want to display the **New** icon in the region.
 - **Updated Item Indicator** if you want to display the **Updated** icon in the region.
6. Click the **Move** icon.
7. Click **Apply**.
8. Click **Close**.

5.5.5 Disabling the Rich Text Editor

By default, when users add or edit a text item, the area of the page where they enter the text includes a WYSIWYG editor. You can disable this feature so that users are provided with a simple text area instead.

To disable the rich text editor:

1. From the Page Groups portlet's **Work In** drop-down list, choose the page group to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
2. Click the **Items** tab.
3. Clear **Enable Rich Text Editor**.
4. Click **OK**.

5.6 Troubleshooting Content Management

I cannot see draft, pending, rejected, or deleted rejected items.

Draft, pending, rejected, and deleted rejected items do not display as expected on pages that are cached at the system level. To avoid access problems, do not cache pages (or templates) at the system level when Approvals and Notifications are enabled. See [Section 21.1, "Page Caching"](#).

I am not being given the option of using Oracle BPEL workflow processes for approvals.

Before you can select Oracle BPEL as an option for approvals, you need to enable the Content Management Event Framework (CMEF). Oracle BPEL uses CMEF to communicate with Oracle Portal. See [Section 5.4.1, "Enabling Oracle BPEL Approval Processes."](#)

I cannot see the Oracle BPEL workflow process that I want to use on the Approvals tab.

Before you can use an Oracle BPEL workflow process, the portal administrator must first create a process definition for it. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

Part III

Creating Pages

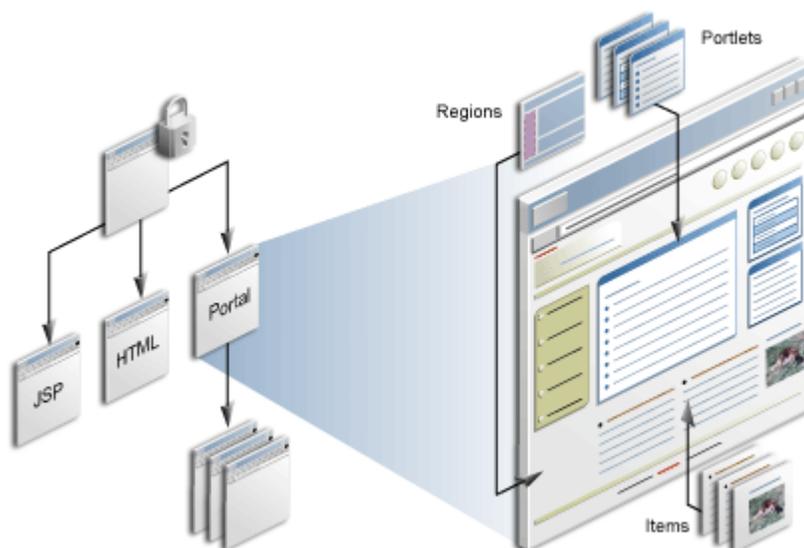
Part III contains the following chapters:

- [Chapter 6, "Creating Pages"](#)
- [Chapter 7, "Defining and Displaying Page Information"](#)
- [Chapter 8, "Performing Actions on Pages"](#)
- [Chapter 9, "Working with Pages Designed for Mobile Devices"](#)

Creating Pages

To the casual observer, the portal you create using Oracle Portal appears to be hierarchical groups of Web pages that contain your content. Look a little deeper and you will find that, although portal pages are as easy to assemble and use as any other Web page, they bring with them powerful intelligence, security, and content management tools you can use to create a rich Web experience for your users.

Figure 6–1 *Conceptual Model of Pages in Oracle Portal*



This chapter defines pages as they are used in Oracle Portal and explains how to create different types of pages. It includes the following main sections:

- [Section 6.1, "Understanding Pages in Oracle Portal"](#)
- [Section 6.2, "Creating a Standard Page"](#)
- [Section 6.3, "Creating a Sub-Page"](#)
- [Section 6.4, "Creating a URL Page"](#)
- [Section 6.5, "Creating a PL/SQL Page"](#)
- [Section 6.6, "Creating a JavaServer Page \(JSP\)"](#)
- [Section 6.7, "Creating a Mobile Page"](#)
- [Section 6.9, "Editing Page Properties"](#)

- [Section 6.10, "Troubleshooting Page Creation"](#)

Oracle Portal provides several caching options to assist page designers and administrators with optimizing the performance of their portal pages, portlets, and templates. To find out more about caching, see [Chapter 21, "Improving Page Performance"](#).

Intended Audience

This chapter is intended for users with at least the page privilege *Manage* on one or more pages. For tasks that require different privileges, those privileges are listed before that task. For more information on page privileges, see [Appendix B, "Page Group Object Privileges"](#).

6.1 Understanding Pages in Oracle Portal

In Oracle Portal, a page is an object that has a user-defined layout, contains portlets and items, and carries additional attributes that store information about the page (the page's *metadata*). Each time you display a page, it is dynamically assembled and formatted according to the content and layout associated with that page.

Much of this guide goes into detail about the underlying structure of pages and content. This section takes a high-level look at pages and provides information about putting them to best use. It includes the following subsections:

- [Section 6.1.1, "Pages and Page Types in Oracle Portal"](#)
- [Section 6.1.2, "When To Use Each Page Type"](#)

Note: For information on how to publish a page as a portlet, see [Chapter 8, "Performing Actions on Pages"](#).

6.1.1 Pages and Page Types in Oracle Portal

In Oracle Portal, pages are created from base page types. Page types define the allowable content of a page and the information that is stored about a page. Depending on the page type, page content might be portlets, items, URLs, PL/SQL, or standard Web encoding languages, such as HTML and Java. Page information is gathered through attributes that accept values. When users create a page, they enter or select values for the page's associated attributes. Some attribute values are required, and some are optional.

The different page types have attributes in common as well as attributes unique to their types. Examples of attributes associated with base page types include the page's internal name, display name, description, and associated procedures.

Base page types include:

- **Standard**—These contain and manage items, portlets, tabs, and sub-page links.
- **URL**—These provide a route to another Web page, identified by its URL. When a user clicks the page link, the Web page referenced by the link is displayed.
- **PL/SQL**—These consist of PL/SQL code that executes when the page URL is accessed.
- **JavaServer Pages (JSPs)**—These are an extension to servlet functionality that provides a simple programmatic interface to Web pages. JSPs are HTML pages with special tags and embedded Java code that is executed on the Web or the

application server. JSPs provide dynamic functionality to HTML pages. They are compiled into servlets when first requested, and they run in the servlet container.

Custom page types are extended base page types. That is, they are page types that carry attributes in addition to the ones provided with a base type. You can create custom page types from the base types standard, URL, and PL/SQL.

The standard attributes that come with these page types are fixed and unalterable. This means that you can build custom types with attributes additional to the standard attributes; but you cannot build custom types that omit any of the standard attributes.

Additionally, there are Mobile pages and Navigation pages:

- **Mobile pages** enable page creators to produce pages specifically for mobile devices, such as personal digital assistants (PDAs) and cell phones.
- **Navigation pages** are special page types for providing standard navigational objects across multiple pages. For more information about navigation pages, see [Chapter 13, "Designing Your Portal's Navigation"](#).

6.1.2 When To Use Each Page Type

Oracle Portal provides different page types to accommodate different needs:

The Standard Page Type

The Standard page type is provided for building portal pages declaratively, using a page creation wizard. This is the most commonly used page type.

The URL Page Type

The URL page type is provided for cases where the portal page/sub-page hierarchy will include content (typically) outside the portal. Because pages that use the URL page type have properties, like standard pages, the page designer can set access controls, assign attributes, and set attribute values.

The PL/SQL Page Type

The use case for the PL/SQL page type is much like that for the URL page type. That is, its purpose is to support building a hierarchy of pages that are accessed in a uniform way. But instead of a page that accesses content through a URL, the page designer creates a page that accesses content through a PL/SQL procedure that executes when users click the link to the page.

The JSP Page Type

JSPs are provided for the inclusion of dynamically executed Java code within the framework of an HTML page.

6.2 Creating a Standard Page

Standard pages display portlets, items, tabs, and sub-page links. Use the standard page type when you want to build portal pages declaratively using a page creation wizard. In the wizard you supply the basic information that you need to create the page. You may need to edit the page after its initial creation to specify further information, such as the style to use or access settings to apply.

Note: To create a standard page, you must have at least the page privilege *Manage* on the new page's parent page.

To create a standard page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the page to be created.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Layout & Appearance** section, click the **Create** link next to the **Pages** heading.

If the page is a sub-page of an existing page (rather than of the page group's root page), follow the steps outlined in [Section 6.3, "Creating a Sub-Page"](#). Then return to Step 5 in this section.

5. On the resulting page, choose **Standard** from the **Page Type** list.

If Standard is not included in this list, the Standard page type has been excluded from the page group. If you have the required privilege level, you can click the **Configure** link next to the **Page Type** list to configure the page group to include standard pages. If you do not have the required privileges, see your page group administrator.

6. In the **Display Name** field, enter a Display Name to identify the page to other users.

Use up to 256 characters of any kind. The display name identifies the page in the Page Groups portlet and the Portal Navigator. It is also used as the text for the *Current Page* Smart Text item and for the page title in a browser's title bar.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. Under the Template section, choose from:
 - **Do not use a template**
 - **Use HTML Page Skin** to use your own hand-coded HTML template on the page
 - **Use Portal Template** to use a declaratively built template on the page

Templates are discussed in detail in [Chapter 12, "Providing a Standard Look and Feel"](#).

The **Preview** section provides an example of the structure and content of the template.

Note: You cannot add new regions to pages based on a Portal Template. You should apply a template to a page only if you are sure that the template provides the exact layout you will use for your page.

8. From the **Navigation Page For Banner** list, choose a navigation page to use as a banner for the page.

The navigation page is added as a portlet to a region that spans the top of the page. Choose a navigation page that fits appropriately. If you will not use any of the provided pages, choose <None> from this list.

This list includes all the navigation pages in this page group and the Shared Objects page group.

If you apply a Portal Template to this page, the navigation page you select from this list is ignored.

Note: For more information about navigation pages, see [Chapter 13, "Designing Your Portal's Navigation"](#)

9. Click **Create** to create the page and display it in **Edit** mode.
10. When you create a new page, various properties, such as style and access settings, are defaulted to make the creation process quicker. After you have created your page you may want to edit the properties of the page to change some of these default settings.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties."](#)

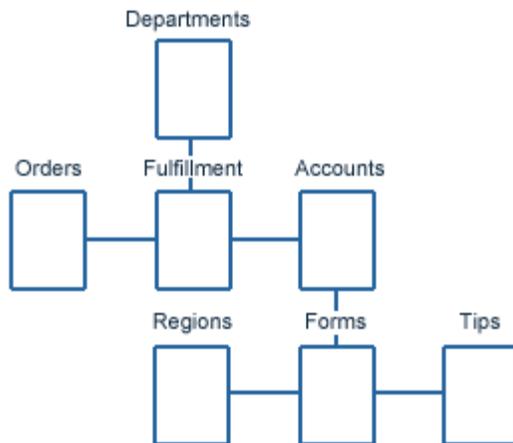
You do not have to go through a wizard to create a standard page. You can also create standard pages using WebDAV or by executing an unzip operation with a Zip file that includes a directory structure. For more information about WebDAV, see [Chapter 18, "Using WebDAV Clients with Oracle Portal."](#) For more information about using Zip files with your portal, see [Section 14.3, "Uploading Multiple Files Simultaneously."](#)

6.3 Creating a Sub-Page

Any page you add to a page group is a sub-page to the page group's root page. The root is the page that is created when you create a page group. You may want to add a hierarchy of sub-pages to create additional page levels. For example, let's say you have the page group *Departments*, under which you create the sub-pages *Orders*, *Fulfillment*, and *Accounts*. Under the *Accounts* page, you create three sub-pages: *Regions*, *Forms*, and *Tips* ([Figure 6-2](#)). In such a structure, *Departments* is the root page; *Orders*, *Fulfillment*, and *Accounts* are sub-pages of the root page; and *Regions*, *Forms*, and *Tips* are sub-pages of their parent page, *Accounts*.

This section explains how to create a sub-page to a standard page.

Figure 6–2 Structure of the Departments Page Group



To create a sub-page to a standard page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group to own the sub-page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page under which to add sub-pages.

This opens the page in Edit mode.

5. Click the **Create: Sub-Pages** link in the toolbar at the top of the page.
6. Follow the steps for creating a page as described in [Section 6.2, "Creating a Standard Page"](#).

You can create other types of sub-pages beneath a standard page. For more information, see the other sections in this chapter.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties"](#).

6.4 Creating a URL Page

URL pages display the content of a particular URL. They enable you to transparently include information from other sites in your page group.

Note: To create a URL page, you must have at least the page privilege *Manage* on the new page's parent page.

To create a URL page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.

3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the URL page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Pages** heading.

If the page is a sub-page of an existing page (rather than of the page group's root page), follow the steps outlined in [Section 6.3, "Creating a Sub-Page"](#). Then return to Step 5 in this section.

5. On the resulting page, select **URL** from the **Page Type** list.

If URL is not included in this list, the URL page type has been excluded from the page group. If you have the required privilege level, you can click the **Configure** link next to the Page Type list, and configure the page group to include this type.

Note: For more information on configuring page types, see [Chapter 4, "Working with Page Groups"](#)

6. In the **Display Name** field, enter a display name for the page.

Enter up to 256 characters of any kind. The display name identifies the page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. In the **URL** field, enter the URL of the target Web page.

8. Click **Create** to create the page.

9. After you have created your page you may want to either create another page or edit the properties of the newly created page to add more detail.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties."](#)

6.5 Creating a PL/SQL Page

PL/SQL pages display the results of executed PL/SQL code. PL/SQL pages provide one of the ways you can include data from your database in your page group. In Oracle Portal, you have the added benefit of security features offered through the portal's access settings.

Note: To create a page, you must have at least the page privilege *Manage* on the new page's parent page.

To create a PL/SQL page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the PL/SQL page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Pages** heading.

If the page is a sub-page of an existing page (rather than of the page group's root page), follow the steps outlined in [Section 6.3, "Creating a Sub-Page"](#). Then return to Step 5 in this section.

5. On the resulting page, select **PL/SQL** from the **Page Type** list.

If PL/SQL is not included in this list, the PL/SQL page type has been excluded from the page group. If you have the required privilege, you can click the **Configure** link next to the Page Type list, and configure the page group to include this type. Otherwise, ask the Page Group administrator to include the type.

Note: For more information on configuring a page group, see [Chapter 4, "Working with Page Groups"](#)

6. In the **Display Name** field, enter a Display Name for the page.

Use up to 256 characters of any kind. The Display Name identifies the page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

7. In the **PL/SQL Code** field, enter (or paste) the PL/SQL code to execute when the page is displayed.

You do not need to include BEGIN and END statements, but you must include the final semicolon (;).

Note: The PL/SQL code you enter here is not validated. Validation is performed when an attempt is made to execute the code. If the code is good, it executes when the page is rendered. If the code is invalid, error messages are returned. Once you create the page, be sure to test the code.

8. In the **PL/SQL Execute Options** section, select either:

- **Public** to execute the PL/SQL code as the PUBLIC database schema.
- **Creator** to execute the PL/SQL code as the database schema that is mapped to your user account.
- **Schema** to execute the PL/SQL code as a specific database schema. Enter the database schema name, or click the **Browse** icon and select a schema from the

list provided. This option is available only to users with the global privilege *Manage* on the object type *All Schemas*.

9. Click **Create** to create the page.
10. After you have created your page you may want to either create another page or edit the properties of the newly created page to add more detail.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties."](#)

6.6 Creating a JavaServer Page (JSP)

JavaServer Pages (JSPs) are HTML pages with special tags and embedded Java code that is executed on the Web or the application server. JSPs provide dynamic functionality to HTML pages.

In addition to the inherent virtues of a JSP, you have the added benefit of Oracle Portal caching and security features, which can be applied to the JSPs you create through your portal.

To create JSPs in Oracle Portal, the page group must be configured to allow JSP access, and the JSP page type must be included in the Page Group's list of available page types. For more information, see [Section 4.5.9, "Enabling JavaServer Page Access to a Page Group"](#) and [Chapter 5.2.3.3, "Making a Page Type Available to a Page Group"](#).

This section describes two ways to create JSPs through the Oracle Portal user interface:

- [Section 6.6.1, "Creating a JSP Through the Page Creation Wizard"](#)
- [Section 6.6.2, "Creating a JSP By Copying Another Page"](#)



You can also create JSPs for use in Oracle Portal outside the Portal user interface, for example with Oracle JDeveloper. For more information, see the Oracle JDeveloper page on the Oracle Technology Network, <http://otn.oracle.com/products/jdev/content.html>.

6.6.1 Creating a JSP Through the Page Creation Wizard

To create a JSP through the Page Creation Wizard:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the JSP.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Pages** heading.

If the page will be a sub-page of an existing page (rather than of the page group's root page), follow the steps outlined in [Section 6.3, "Creating a Sub-Page"](#). Then return to Step 5 in this section.

5. On the resulting page, select **JSP** from the **Page Type** list.
6. In the **Display Name** field, enter a Display Name for the page.

Use up to 256 characters of any kind. The Display Name identifies the page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. In the **File Name** field under **JSP Source**, enter the location and file name of the JSP to execute when users view the page.
You can also enter a JAR or WAR file in this field. Alternatively, click **Browse** to locate and select the file.
8. In the **Initial JSP File** field under **Initial JSP File for JAR or WAR Files**, enter the name of the JSP file to execute when the user first views the page.
Do this only if you uploaded a JAR or WAR file in the previous step.
9. Click **Create**.
10. After you have created your page you may want to either create another page or edit the properties of the newly created page to add more detail.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties."](#)

6.6.2 Creating a JSP By Copying Another Page

Note: Only Standard pages or custom pages based on the Standard page type can be copied as a JSP.

To create a JSP by copying an existing page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be copied.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. In the Layout & Appearance section, click the **Browse** link next to the **Pages** heading.
5. On the resulting page, click the **Copy as JSP** link next to the relevant page.
6. In the **Display Name** field, enter a Display Name for the page.

Use up to 256 characters of any kind. The Display Name identifies the page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. Under **Content Options**, choose from:

- **Use Original Page's Portlet Instances.** Select this option to use the portlets on the original JSP and to share the personalizations that were made to those portlets. If a portlet is deleted from the original page, it is also removed from the JSP that shares it.
- **Create Externally Published Portlets.** Select this option to create an externally published portlet for each portlet on the original page, and then use the externally published portlets on the JSP. If you select this option, any personalizations made to the portlets on the original page are not carried over to the portlets on the JSP. For example, changes to develop-in-place portlets, such as the OmniPortlet, the Web Clipping portlet, and the HTML portlet, are lost because any changes to those portlets are regarded as personalizations.

8. Click **OK**.

Note: For information about editing page properties, see [Section 6.9, "Editing Page Properties"](#).

6.7 Creating a Mobile Page

Mobile pages provide a way to design the display of portlets and items specifically for mobile devices, such as cell phones. Standard pages can also be displayed in mobile devices; however, the standard page design environment is more suited to creating pages for larger display devices, such as computer monitors.

Mobile pages are discussed in detail in [Chapter 9, "Working with Pages Designed for Mobile Devices"](#).

Note: To create a mobile page, you must have at least the page privilege *Manage* on the new page's parent page.

To create a mobile page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the mobile page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Pages** heading.

If the page is a sub-page of an existing page (rather than of the page group's root page), follow the steps outlined in [Section 6.3, "Creating a Sub-Page"](#). Then return to Step 5 in this section.

5. On the resulting page, select *Mobile* from the **Page Type** list.

If **Mobile** is not included in this list, the Mobile page type has not been included in the page group. If you have administrative privileges, you can add this type to the list of available types by clicking the **Configure** link next to the **Page Type** field. This takes you to a page where you can configure the page group to include the Mobile page type. The **Configure** link displays only for users with the required access, such as the page group administrator.

6. In the **Display Name** field, enter a Display Name for the page.

Use up to 256 characters of any kind. The Display Name identifies the page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. Select:

- **Blank Page** to create a blank mobile page.
- **Base On Existing Page** to pre-populate the mobile page with all the content from an existing page.

Click the **Browse** icon next to the **Base On Existing Page** field, and the **Return Object** link next to the page you will use as the starting point for your mobile page.

Note: You can base a mobile page only on a Standard page. If you want to create a new mobile page based on an existing mobile page, copy the mobile page, then edit the copy.

8. Click **Create** to create the page.

If you based your mobile page on an existing page, and the existing page is complex, the page creation process may take a while as the existing page is converted into a layout that is more suited for display on mobile devices. When you click the **Finish** button, you are given the opportunity of continuing the page creation process in the background so that you can move on to other tasks. If you attempt to edit the mobile page before the creation is completed, a pop up window will inform you that the page is not yet complete.

9. After you have created your page you may want to either create another page or edit the properties of the newly created page to add more detail.

Note: For information on editing page properties, see [Section 6.9, "Editing Page Properties."](#)

If you add a portlet to a page that was used as the starting point for a mobile page, that portlet will not appear on the mobile page. If you want the portlet to also appear on the mobile page, you must add it to the mobile page. Additionally, if you want to share any personalizations made to the portlet between the two pages, you must explicitly share the portlet on one page, and then add that shared portlet instance to

the other page. For more information, see [Section 15.7, "Sharing a Portlet Across Multiple Pages"](#).

6.8 Creating a Navigation Page

Navigation pages are discussed in detail in [Chapter 13, "Designing Your Portal's Navigation"](#). This section briefly covers how to create a navigation page.

To create a navigation page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the navigation page.

Tip: To use this navigation page in more than one page group, create it in the Shared Objects page group. However, keep in mind that to use a shared navigation page in a page group with a non-English default language, you must provide a translated version of the shared navigation page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Navigation Pages** heading.

This opens the Create Navigation Page screen.

5. In the **Display Name** field, enter a Display Name for the navigation page.

Use up to 256 characters of any kind. The Display Name is used to identify the navigation page in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

6. In the **Copy From** list, choose a navigation page to use as a starting point for your new navigation page.

This creates a copy of the selected page. The list includes all the navigation pages in this page group on which you have at least the page privilege *View*.

To start with a blank navigation page, choose **<None>**.

7. Select **Publish As Portlet** to make this navigation page available to other users.

Eventually you will need to publish the navigation page as a portlet so that other users can add it to their pages. However, while the navigation page is under development, you might prefer to clear this check box.

Note: If you do not see the Publish As Portlet check box, you do not have portlet publishing privileges. Contact your portal administrator to request these privileges.

8. Click **Create**.

The navigation page opens in Edit mode.

6.9 Editing Page Properties

Edit page properties to revise basic page information, such as its Name and Display Name and its page caching and assembly rules.

To edit page properties:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, select the page group that owns the page to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the **Layout & Appearance** section, click the name of the relevant page.

If the page is a Standard type page, this opens the page in Edit mode. Click the **Page: Properties** link in the toolbar at the top of the page.

For other types of page, this takes you directly to the Edit Page page.

Note: If the page is not included in those listed in the Page Groups portlet, click the **More Pages** link that displays at the end of the list.

If the page is a sub-page, drill down through the resulting list of pages until you reach the point where your page is listed. Click the **Properties** link next to the page, and skip the next step in this process.

5. Move from tab to tab, and edit properties as desired:
 - **Main**—Change the name or display name of the page; add a description; select page caching options; and specify the page assembly timeout.

The Name attribute differs from the Display Name attribute both in the way Oracle Portal uses it and in the rules that govern which characters can be used in its formation. Oracle Portal uses the name in the formation of path-based URLs. It is also used in instances when the page is viewed outside of Oracle Portal, for example, when it is viewed through a WebDAV client.

The default value in the Name field is taken from the display name provided when the page was created. The value is truncated to 60 characters and any special characters are discarded. Discarded characters include:

`& # % \ / : * ? < > | , "`

For example, if the display name is `Research & Development`, the name is `Research Development`.

The name is case sensitive. It must be unique among all pages, sub-pages, and first-level tabs in the page group. Oracle Portal checks the value of the Name field for uniqueness and appends a number in cases where another object at the same level in the page group's page hierarchy has the same name.

For additional information about the naming rules that apply to pages and other portal objects, see [Appendix D, "Object Naming Rules in Oracle Portal."](#)

For information on page caching and page assembly timeout options, see [Chapter 21, "Improving Page Performance."](#)

- **URL**—Change the URL referenced by a URL page.
 - **PL/SQL**—Change the PL/SQL code for a PL/SQL page.
 - **JSP Source**—Change the JSP file for a JSP page.
 - **Template**—Select a different template. For more information, see [Section 12.2.1.2, "Applying Portal Templates for Pages"](#) or [Section 12.3.1.2, "Applying an HTML Page Skin."](#)
 - **Style**—Select a style to define the colors and fonts to use for the page. For more information, see [Section 11.8.1, "Applying a Style to a Page."](#)
 - **Access**—Define who can access the page and what level of control they have over the page. For more information, see [Section 17.5, "Securing Pages."](#)
 - **Items**—Specify the item versioning level; portal template assignment; WebDAV default item types; and default region for placing content. For more information, see:
 - [Section 7.1, "Enabling Item Versioning for Page Groups, Pages, and Templates"](#)
 - [Section 12.2.2.2, "Applying Portal Templates for Items"](#)
 - [Section 18.2.1, "Specifying Default Item Types for Zip and WebDAV Uploads"](#)
 - [Section 7.8.1, "Selecting Default Regions for a Page"](#)
 - **Optional**—Publish the page as a portlet; specify the page contact, category, keywords, perspectives, images, and sub-page display details. For more information, see [Section 8.5.1, "Publishing a Page as a Portlet"](#) and [Chapter 7, "Defining and Displaying Page Information."](#)
 - **Parameters**—Set up page parameters. For more information, see [Chapter 22, "Using Parameters and Events."](#)
 - **Events**—Set up page events. For more information, see [Chapter 22, "Using Parameters and Events."](#)
 - **Approval**—Set up an approval process for the page. For more information, see [Chapter 20, "Setting Up an Approval Chain."](#)
6. Click OK when you are done.

6.10 Troubleshooting Page Creation

I selected a navigation page for my page banner, but the one provided by the template appears instead.

When you apply a Portal Template to a page, this discards any navigation page you selected for a page banner. The assumption is such page elements are always provided by the template.

If you must use the navigation page you selected, then you must either add it to the template or add it as a portlet to the page after the page is created. For information

about adding portlets to pages, see [Section 15.1, "Adding a Portlet to a Page"](#). For information about templates, see [Chapter 12, "Providing a Standard Look and Feel"](#).

Another approach is to use an HTML page skin, which enables you to add HTML around the body of a page. The page's original banner continues to display because it is part of the body of the page. The page skin wraps around the body. For more information on HTML page skins, see [Chapter 12, "Providing a Standard Look and Feel"](#).

When I click the Refresh link on a portal page, I get an error message and the page does not refresh.

The page definition may be cached at the system level. When this is the case, the same page definition data is retrieved from cache for all users. For this reason, links on the page that are normally viewed only by authorized users will also be displayed to all users authorized to view the page. However, users can still perform only those actions for which they are authorized, that is, for which they have the appropriate access privileges. When users click a link to a page or function on which they are not authorized, they see an error message and cannot open the link's target.

In this case, the Refresh link refreshes the page by regenerating it from the database—a task available only to authorized users. Try clicking the refresh link on your browser to achieve your desired effect.

My page is taking too long to render.

Check the setting for Page Assembly Timeout on the Main tab of page properties. If the option **Wait For All Portlets to Return Before Displaying the Page** is selected, it could be that some of the portlets on your page are slow to render. In this case, the entire page rendering is held up until the portlets are assembled and ready to display.

To test this, select the option **Limit Time Fetching Portlets to [] Seconds**, and set a low value. With this selection, page rendering takes place, whether or not all portlets are ready to render, within the specified time limit. Portlets render when ready. If the page renders more quickly, consider making this a permanent change.

If this does not improve page performance, review the page's caching selection. If the page is based on a template, review the template's caching selection. Perhaps the page will benefit from performance tuning. For more information on caching and performance tuning, see [Chapter 21, "Improving Page Performance"](#). Template caching options are discussed in [Chapter 12, "Providing a Standard Look and Feel"](#).

When I edit a page, I am not given the option to select a style for the page.

If the page is based on a Portal Template that does not allow privileged users to choose their own page style, the style selection screen does not display when you create a page, and the Style tab does not display when you edit a page. If you have sufficient access to the template, you can edit the template and select **Enable Pages To Use Different Style** on the Style tab of template properties. Once this setting is selected, the Style tab displays in page properties.

Another possibility is that the page group that owns the page is not configured to allow privileged users to manage a page style. This option is available on the Main tab of page group properties. It must be selected for users to select a style for any pages in the page group.

When I edit a page, I am not given the option to specify access settings.

The page may be based on a Portal Template that does not allow the pages based on it to have access rules other than those provided by the template. If this is the case, the

page access screen does not display when you create the page, and the Access tab does not display when you edit the page.

If you have sufficient access to the template, you can edit the template and select **Enable Pages to Have Different Access** on the Access tab of template properties. Once this option is selected, the Access tab displays in page properties for pages that are based on the template.

I want to create a sub-page, but I don't see the Create Sub-Pages link in the page toolbar when I edit the page.

You must have at least the page privilege *Manage* on a page to be able to add sub-pages to it. Ask the page owner or the page group administrator for a higher level of privilege on the page.

Is there some special trick to publishing a page?

No. Display the page in View mode. Copy the URL from your browser's address bar, and send it to users. Public pages display to any users who enter the URL in their browser address bars. Secure pages will first invoke a login screen, in which users must enter their user name and password before they can access the page.

I want to create a particular type of page, but I don't see it in the selection list; additionally, I don't see the Configure link next to the Page Type list that is mentioned in the documentation.

These two issues may actually be one: your privilege level on the page group must be raised to allow for the selection of additional page types. Once you have at least the page group privilege *Manage All*, you can perform such tasks.

My page display name is not accepting 256 characters.

The character value discussed in the documentation is equivalent to bytes. If you are entering multibyte characters, the allowable number of characters is reduced to whatever amount is equal to 256 bytes.

Defining and Displaying Page Information

In Oracle Portal, every page has associated attributes that capture information about the page. These include how the page should display sub-page links, what keywords to associate with the page, who to contact with questions or concerns about the page, and so on.

Figure 7-1 Page Attributes Accept Values That Uniquely Define a Page



This chapter discusses how to provide values to these attributes and how to display the values as well as other types of page information. It includes the following main sections:

- [Section 7.1, "Enabling Item Versioning for Page Groups, Pages, and Templates"](#)
- [Section 7.2, "Listing the Pages You Manage"](#)
- [Section 7.3, "Viewing Information About Pages and Page Content"](#)
- [Section 7.4, "Classifying a Page"](#)
- [Section 7.5, "Adding Keywords to a Page"](#)

- [Section 7.6, "Specifying a Page Contact"](#)
- [Section 7.7, "Specifying a Representative Image for a Page"](#)
- [Section 7.8, "Selecting Default Regions for Content Uploads"](#)
- [Section 7.9, "Defining the Display of Sub-Page Links"](#)
- [Section 7.10, "Troubleshooting Page Information Issues"](#)

Intended Audience

The content of this chapter is intended for users with at least the page privilege *Manage* on the relevant pages. If a particular task requires or can be performed under different privileges, those privileges are listed before the steps of that task. For more information on page privileges, see [Appendix B, "Page Group Object Privileges"](#).

7.1 Enabling Item Versioning for Page Groups, Pages, and Templates

Item versioning determines what happens to the old version of an item when a new version is added. Oracle Portal provides different levels of item versioning for page content, which you can apply to a page group, a page, or a Portal Template.

The item versioning level that is set for a page group can be overridden by a higher setting on a page or a Portal Template. For example, if the item versioning level for a page group is set to **Simple**, you can set the item versioning level for a page or Portal Template to **Audit** (a higher level), but not to **None** (a lower level).

Set item versioning for page groups, Portal Templates, Standard pages, and custom pages that are based on the Standard page type.

Note that, even when versioning is enabled, items with a status of *Draft*, do not use item versioning. New draft items always overwrite previous drafts.

To set the item versioning level for a page group, a page, or a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant root page, standard or custom page, or Portal Template on which to set the item versioning level.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the link to the relevant root page, sub-page, or Portal Template.

This opens the object in Edit mode.

5. Click the **Properties** link at the top of the page as follows:
 - To set item versioning on a page group, click **Page Group: Properties**.
 - To set item versioning on a page, click **Page: Properties**.
 - To set item versioning on a Portal Template, click **Template: Properties**.
6. On the resulting page, click the **Items** tab to bring it forward.
7. In the **Item Versioning** radio group, select:

- **None** to completely replace the item's previous version when a newer version is provided. If you choose this option, none of the item's previous versions are retained in the Portal Repository.
- **Simple** to provide the choice of completely replacing the previous version of the item with the newer version or adding a new version of the item that leaves the previous version untouched. If the contributor chooses the latter, all of the item's previous versions are retained in the Portal Repository.
- **Audit** to save all previous versions of an item. If you choose this option, all of the item's previous versions are retained in the Portal Repository.

The choices available here depend on the choice that was made at the page group level. That is, if the item versioning level for a *page group* is set to **Simple**, you have the choice of **Audit** at the *page* (or *Portal Template*) level, but not **None**.

8. Click **OK** to return to the page.

7.2 Listing the Pages You Manage

The User Managed Pages portlet provides a window on all of the pages that you manage within a given page group. The portlet not only lists all of the pages on which you have the page privilege *Manage*, but also provides a link to each page for quick access.

Note: To add this portlet so that all authenticated users can see it, you must have at least the page privilege *Manage Content* on the page where you will place it.

You can also add the User Managed Pages portlet to your own view of a page if you have at least the page privilege *Add-Only Personalize Portlets* on the page. The portlet will be visible only in your personal view the page; other users will not see it in their views.

For information on page privileges, see [Appendix B, "Page Group Object Privileges"](#).

To add the User Managed Pages portlet to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page you will work with.
This opens the page in Edit mode.
5. Go to the region where you will add the portlet, click the **Add Portlets** icon.
This opens the Portlet Repository.
6. In the repository's **Search** field, enter `User Managed Pages`, and click **Go**.

Tip: By default, the User Managed Pages portlet is located under the Portal Content Tools page of the Portlet Repository.

7. Click **User Managed Pages** to add it to the **Selected Portlets** list.
8. Click **OK** to return to the page.
9. Optionally, click the portlet's **Edit Defaults** icon.

If you are in View mode, rather than Edit mode, you can click the **Personalize** link in the portlet's header.

Note: For the Personalize link to display in the portlet's header, the containing page must be in View mode, and Headers and the Personalize Link must be enabled in the portlet region's Portlet Display Options. For more information, see [Section 10.2, "Configuring Region Display Options"](#).

10. Optionally, in the **Display Name** field provide your own name for the portlet.
For example, *My Pages*.
11. In the **Number Of Pages** field, enter the number of pages to display.
Leave the field blank to display all the pages on which you have the page privilege *Manage*, up to a maximum of 99,999.
12. In the **Order By** list, choose either:
 - **Display Name** to order the pages alphabetically from A to Z
 - **Creation Date** to order pages from the most recently created to the oldest

Note: When you order by creation date, the portlet lists page Display Names in creation order, rather than listing page creation dates.

13. Click **OK** to return to the page.

7.3 Viewing Information About Pages and Page Content

Viewing a property sheet is a convenient and quick way to display page properties or item and portlet attributes. Each page and each item and portlet on the page has its own property sheet. Property sheets provide detailed information about a page, an item, or a portlet.

Though all property sheets have properties in common, displayed properties vary according to the object type. For example, a page property sheet lists the page contact. This information is not specifically relevant to portlets and items, and neither portlet nor item property sheets include it. In contrast, all property sheets display the object's display name, description, and classification.

The property sheets discussed in this section differ from the ones you can view by right-clicking the object and selecting Properties from the resulting menu. The right-click properties are generated by your operating system. The ones discussed here are generated by your portal.

This section explains how to expose and access page, item, and portlet property sheets. It includes the following subsections:

- [Section 7.3.1, "Viewing Page Property Sheets"](#)
- [Section 7.3.2, "Viewing Portlet Property Sheets"](#)
- [Section 7.3.3, "Viewing Item Property Sheets"](#)

You must be logged on with the appropriate page or item level privilege to see the property sheet icon.

Note: If your page does not contain these icons, your page designer has not selected the Property Sheet attribute for display in the page region. See [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#) and [Section 13.6.6, "Adding a Portal Smart Link Item"](#).

7.3.1 Viewing Page Property Sheets

The page property sheet provides a quick look at some useful information about the page or tab from which it is accessed. This includes the page's or tab's path-based and durable URLs, the page's assigned contact, its current caching option, whether the page is also published as a portlet, and so on.

To access the page property sheet:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.

This opens the page in Edit mode.

5. In the top left corner of the page toolbar, click the Page Properties icon ([Figure 7-2](#)).

Figure 7-2 Page Properties Icon



This opens the page property sheet (for example, [Figure 7-3](#)).

Figure 7-3 Example Page Property Sheet

Required Properties	
Name:	Sample
URL:	https://...
Durable URL:	https://...
Page Type:	Standard
Display Name:	Sample root page
Description:	<None>
Created:	31-JAN-2005 07:27 AM (PMAINS_050130)
Last Modified:	31-JAN-2005 07:27 AM (PMAINS_050130)
Style:	Sample style
Page Caching Status:	Cache Page Definition Only
Page Group ID:	34
Page ID:	1
Optional Properties	
Publish As Portlet:	No
Item Versioning:	None
Contact E-mail:	<None>
Category:	General
Keywords:	<None>
Perspectives:	<None>

- Click the **Close** button to close the property sheet window.

You can also place the Smart Link *Property Sheet* in any item region to get a look at a combination of page and region properties. When the Smart Link is placed on a tab, the URL and durable URL listed in the property sheet are for the tab. You can use these URLs to target the page with the current tab selected.

Note that the style listed in this property sheet is always the style of the containing page and not the style applied to the region. This is true even when the region that contains a *Property Sheet* Smart Link uses a style different from the style used on the containing page. For information on adding a Smart Link to a page, see [Section 13.6.6, "Adding a Portal Smart Link Item"](#).

7.3.2 Viewing Portlet Property Sheets

The portlet property sheet provides a quick look at some useful information about a portlet. This includes the portlet's provider, the applied display and cache options, the portlet's description, and so on.

To access a portlet property sheet:

- Log in to Oracle Portal.
- Click the **Build** tab to bring it forward.
- From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page that contains the portlet.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page that contains the relevant portlet.

This opens the page in Edit mode.

5. Click the Property Sheet icon associated with the relevant portlet (Figure 7-4).

This icon does not display by default. The portlet region must be configured to display it.

Figure 7-4 The Property Sheet Icon



The portlet's property sheet displays in a secondary window (Figure 7-5).

Figure 7-5 Example Portlet Property Sheet

Properties	
Created:	23-NOV-2004 05:53 PM
Last Modified:	23-NOV-2004 05:53 PM
Provider ID:	542269997
Provider Name:	ORACLE PORTAL
Portlet ID:	1
Portlet Name:	Favorites
Name:	Favorites
Display Name:	Favorites
Display Option:	Item Displayed Directly In Page Area
Portlet System Cache:	False
Description:	<None>
Category:	General
Basic Search Keywords:	<None>
Perspectives:	<None>

Close

If the Property Sheet icon does not display next to the relevant portlet, the Property Sheet attribute is probably not exposed in the display settings for the region that contains the portlet (or included in the HTML template that is applied to the region). For information on displaying attributes through region display settings, see [Section 10.2, "Configuring Region Display Options"](#). For information on displaying attributes through an HTML template, see [Chapter 12, "Providing a Standard Look and Feel"](#) and [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

6. Click the **Close** button to close the property sheet window.

7.3.3 Viewing Item Property Sheets

The item property sheet provides a quick look at useful information about an item. This includes the item's durable URL, display option, description, and so on.

To access an item property sheet:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page that contains the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page that contains the relevant item.

This opens the page in Edit mode.

5. Click the Property Sheet icon associated with the relevant item (Figure 7-6).

This icon does not display by default. The item region must be configured to display it.

Figure 7-6 The Property Sheet Icon



The item's property sheet displays in a secondary window (Figure 7-7).

Figure 7-7 Example Item Property Sheet

Properties	
Created:	23-NOV-2004 05:31 PM
Last Modified:	24-NOV-2004 09:04 AM
Item Link:	https://...
File Name:	bookmarks.doc
Display Name:	bookmarks
Category:	General
Description:	this is a document
Publish Date:	23-NOV-04
Expires On:	30-NOV-2004 (dd-MON-yyyy)
Perspectives:	<None>
Image:	sbrupdat.gif
Image Alignment:	bottom
Basic Search Keywords:	bookmark search
Author:	jdoe
Checked out by:	<None>
Display Option:	Link That Displays Item In Full Browser Window
Portal Template:	<None>

If the Property Sheet icon does not display next to the relevant item, the Property Sheet attribute is probably not exposed in the display settings for the region that contains the item (or included in the HTML template that is applied to the region). For information on displaying region attributes, see [Section 10.2, "Configuring Region Display Options"](#). For information on displaying attributes through an HTML template, see [Chapter 12, "Providing a Standard Look and Feel"](#) and [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

6. Click the **Close** button to close the property sheet window.

7.4 Classifying a Page

Oracle Portal provides a number of methods for ensuring that your users can locate information. Methods include searchable metadata values, such as an object's author, its keywords, or its classification. Oracle Portal provides categories and perspectives for classifying the purpose and target audience of a page and its content. Users can run a search against one or more categories or perspectives. The search returns a dynamically assembled list of links to all objects classified under those categories and perspectives.

The creation of categories and perspectives is one of the tasks a page group administrator performs in the course of setting up a page group. This task is discussed at length in [Section 5.3, "Setting Up Content Classification"](#).

This section provides information on how to apply categories and perspectives to pages. It includes the following sub-sections:

- [Section 7.4.1, "Assigning a Category to a Page"](#)

- [Section 7.4.2, "Assigning Perspectives to a Page"](#)

For information on creating a custom search to find specified categories or perspective, see [Chapter 16, "Working with Search Portlets"](#).

7.4.1 Assigning a Category to a Page

Note: For information on how to create your own categories, see [Section 5.3, "Setting Up Content Classification"](#).

You can assign one category to a page to classify its content. Your users can perform searches based on the category to find a particular type of content. Specify a category for Standard, URL, and PL/SQL pages, or custom pages that are based on these page types.

To categorize a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to which to assign a category.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the page.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward, and go to the **Optional Page Properties** section.
7. From the **Category** list, choose the category that best describes the purpose or content of the page.

You can choose only one category.

8. Click **OK** to save your changes and return to the page.

7.4.2 Assigning Perspectives to a Page

Note: For information on how to create your own perspectives, see [Section 5.3, "Setting Up Content Classification"](#).

You can assign one or more perspectives to a page to classify its content. Your users can perform searches based on those perspectives to find a particular type of content. Specify perspectives for Standard, URL, and PL/SQL pages, or custom pages that are based on these page types.

To apply one or more perspectives to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.

3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to which to assign perspectives.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page.
This opens the page in Edit mode.
5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward, and go to the **Optional Page Properties** section.
7. Select one or more perspectives from the **Available Perspectives** list, and click the **Move** icon that points to the **Displayed Perspectives** list.
To select multiple perspectives:
 - In Windows operating systems, hold down the Control key and click multiple perspectives, then click the **Move** icon.
 - In UNIX operating systems, click one or more perspectives, and click the **Move** icon.
 - Click the **Move All** icon to move all **Available Perspectives** to **Displayed Perspectives**.
 Use the Move icons to the right of the Displayed Perspectives list to control the display order of the selected perspectives.
8. Click **OK** to save your changes and return to the page.

7.5 Adding Keywords to a Page

When a user performs a search on the portal, each object's attribute values are compared to the search criteria. The Keywords attribute can assist with improving your users' portal experience by increasing the likelihood of meaningful search results.

Add keywords to Standard, URL, and PL/SQL pages, or custom pages that are based on these page types.

To add keywords to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.
This opens the page in Edit mode.
5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward and go to the **Optional Page Properties** section.

7. In the **Keywords** field, enter the keywords that best describe this page.

Separate keywords with a space.

8. Click **OK** to save your changes and return to the page.

Add keywords to an item by editing the item's attributes. For information on editing an item's attributes, see [Section 14.4, "Editing Items"](#). Add keywords to a portlet by editing the portlet instance, that is, a portlet that is placed on a particular page. For information about editing a portlet instance, see [Section 15.3.3, "Editing a Portlet Instance"](#).

7.6 Specifying a Page Contact

Use the page contact attribute to specify the person to contact regarding issues concerning a particular page. The page contact might be the page's designer, the primary content contributor, or even the page group administrator. Who you select is up to you.

Consider selecting a person who has sufficient privileges on the page to adjust access controls, revise templates, and add, remove, or hide page content. Typically, this is a person with the page privilege *Manage* on the relevant page.

Specify a page contact for Standard pages and custom pages that are based on the Standard page type.

Using Portal Smart Links, you can display the relevant page contact on any page you choose. You can place the same Portal Smart Link on five different pages with five different contacts, and the Smart Link will always display the correct contact for each page.

This section explains how to specify a page contact. For information on how to display the page contact, see [Section 13.6.6, "Adding a Portal Smart Link Item"](#).

To specify a page contact:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page for which to specify a contact.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward, and go to the **Optional Page Properties** section.
7. In the **Contact E-mail** field, enter the e-mail address of the page contact.

For example:

`scott@mycompany.com`

8. Click **OK** to save your changes and return to the page.

7.7 Specifying a Representative Image for a Page

When you include a page in a list of objects, you can specify that an image should be used in lieu of the page's display name to represent the page in the list. Additionally, you can specify a rollover image to display when users mouse over the page image.

Specify representative images for Standard, URL, and PL/SQL pages, or custom pages that are based on these page types. The images you specify in this task are also used when the sub-page display option Display Sub-Page Image and Rollover Image is checked. For more information, see [Section 10.2.7.2, "Specifying the Attributes to Display with Sub-Page Links"](#).

To specify a representative image for a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page for which to select a representative image.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward, and go to the **Page Images** section.
7. In the **Image Name** field, enter the path and file name of an image.
Optionally, click the **Browse** button to locate the image.
8. Optionally, in the **Rollover Image Name** field enter the path and file name of the rollover image.
Alternatively, click the **Browse** button to locate the image.
9. Click **OK** to save your changes and return to the page.

7.8 Selecting Default Regions for Content Uploads

When users add items to a page by some means other than the Graphical or Layout view of the page—such as through List view, a WebDAV client, or through unzipping a Zip file in your portal—Oracle Portal must determine the region where the items should be placed.

For example, if a user adds an item to a page using a WebDAV client, that user has no way of specifying the region where the item should be placed. The same is true when a user adds content by unzipping a Zip file. To address this, Oracle Portal provides an option for specifying a page's default item region.

You can also specify a default portlet region. This is useful particularly with Portal Templates. When a user applies a Portal Template to a page that is already populated with content, users are presented with a region mapping interface where the default portlet region is offered as the first option for placement of any portlets on the source page.

For example, imagine that you are applying a Portal Template to a page that is already populated with content. The source page has two portlet regions. You apply a Portal Template to it. The Portal Template has three portlet regions. You are presented with a mapping interface where you can indicate which regions on the source should map to which regions on the template. The default portlet region is the first option presented for placement of the source portlets. You can make an alternate selection if you wish.

Note: For more information about default item regions and WebDAV, see [Chapter 18, "Using WebDAV Clients with Oracle Portal"](#).

You can identify default item and portlet regions on pages or on Portal Templates for pages (for more information about templates, see [Section 12.1.1, "What Are Portal Templates?"](#)). Template default regions are enforced on the pages that use the template. Such pages cannot specify their own default regions.

If you do not explicitly select a default item or portlet region on a page or Portal Template, Oracle Portal selects its own defaults: the second item and portlet regions on the page. The second region is selected, rather than the first, to avoid placing content in regions intended for navigation elements. If the page does not have an eligible portlet or item region, an undefined region is used as the default region. If an item is added, the undefined region becomes an item region; if a portlet is added, the undefined region becomes a portlet region.

This section describes how to select default regions for pages and Portal Templates. It includes the following subsections:

- [Section 7.8.1, "Selecting Default Regions for a Page"](#)
- [Section 7.8.2, "Selecting a Default Region for a Portal Template"](#)

7.8.1 Selecting Default Regions for a Page

To select default portlet and item regions for a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page for which to select a default region.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the page.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Items** tab to bring it forward.
7. In the **Default Region** section, select the region type to configure from the **Default Region Type** list.

Choose from:

- Default Portlet Region
- Default Item Region

8. Select the radio button in the region to identify as the page's default portlet or item region.

Note: You can see radio buttons only in the regions of the type chosen in the **Default Region Type** list. That is, you can only select a portlet region as the default portlet region and an item region as the default item region.

You cannot select an undefined region as a default region. You must edit the region to explicitly make it a portlet or item region first.

9. Click **OK** to save your change and return to the page.

Whenever users upload content to this page using some means other than the portal itself, the content will be placed in the default region you have selected here.

7.8.2 Selecting a Default Region for a Portal Template

To select a default region for a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Portal Templates** heading in the Layout & Appearance section, click the link to the relevant Portal Template.

This opens the template in Edit mode.

5. Click the **Template: Properties** link in the toolbar at the top of the template.
6. On the resulting page, click the **Items** tab to bring it forward.
7. In the **Default Region** section, select the region type to configure from the **Default Region Type** list.

Choose from:

- Default Portlet Region
 - Default Item Region
8. Select the radio button in the region to identify as the template's default portlet or item region.

Note: You can see radio buttons only in the regions of the type chosen in the **Default Region Type** list. That is, you can only select a portlet region as the default portlet region and an item region as the default item region.

You cannot select an undefined region as a default region. You must edit the region to explicitly make it a portlet or item region first.

9. Click **OK** to save your change and return to the template.

Whenever users upload content to a page that is based on the template using some means other than the portal itself, the content will be placed in the default region you have selected here.

7.9 Defining the Display of Sub-Page Links

The sub-page links region is a region that is dedicated to the display of links to the current page's sub-pages. No other types of content display in a sub-page links region. Sub-page links regions enable rapid inclusion of navigational links to pages that are lower in the current page hierarchy.

Using the page-level configuration properties that control the display of sub-page links, you can define which sub-pages should display in a sub-page links region and specify whether sub-page links should display in alphabetical order.

Note: Sub-page links display options affect a page only when that page contains a sub-page links region. For additional information about sub-page links regions, see [Section 10.2.7, "Setting Sub-Page Links Region Properties"](#).

To define the display of sub-page links:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward.
7. Go to the **Sub Page Display** section, and select the sub-page or pages you will display from the **Available Sub-Pages** list.

To make multiple selections:

- In Windows operating systems, hold down the Control key and click each selection.
 - In UNIX operating systems, click each selection.
8. Click the **Move** icon to move selections from the **Available Sub-Pages** list to the **Displayed Sub-Pages** list.

Click the **Move All** icon to move all available sub-pages to the **Displayed Sub-Pages** list.

9. To rearrange the display order, select a sub-page and click the **Move Up** and **Move Down** icons to the right of the **Displayed Sub-Pages** list.
10. To arrange sub-pages alphabetically, select the **Display Objects Alphabetically** check box.

The **Move Up** and **Move Down** icons disappear when you select this option. Any sub-pages you move to the **Displayed Sub-Pages** list will be inserted automatically in alphabetical order.

11. Click **OK** to save your changes and return to the page.

7.10 Troubleshooting Page Information Issues

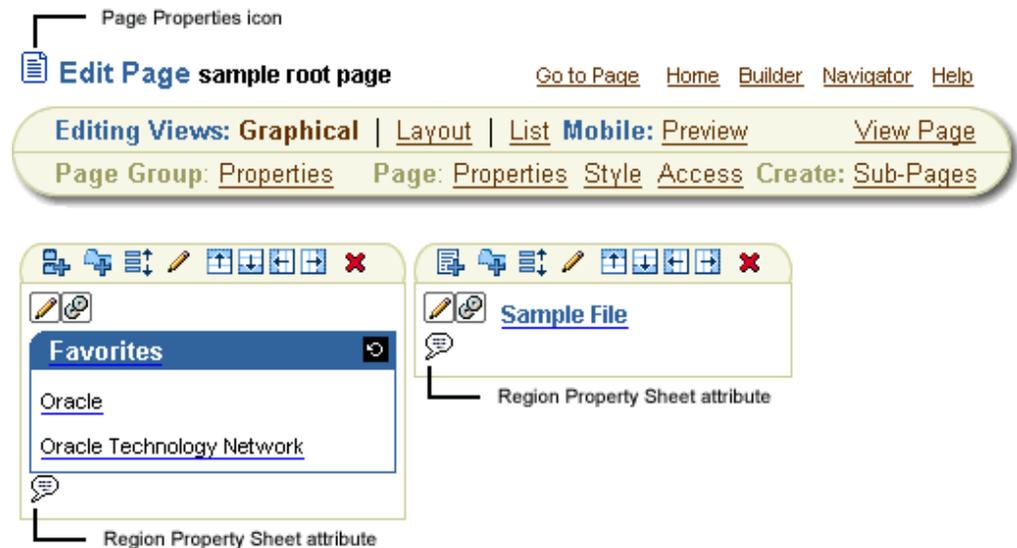
My property sheet does not contain the information described in the documentation.

You can invoke two kinds of property sheets for pages, portlets, and items. One renders when you right-click an object and select **Properties** from the resulting menu. This property sheet is generated from your system. The other comes from double-clicking the Property icon associated with the object. This property sheet comes from your portal. This is the property sheet covered in the documentation.

For portal pages, the Property icon is available when you edit the page. It displays at the top of the page next to the page path (Figure 7-8).

For items and portlets, you must deliberately expose the Property Sheet attribute in the region where the item or portlet is placed. This icon displays in both View and Edit modes (Figure 7-8).

Figure 7-8 Property Icons Associated with Pages, Portlet Regions, and Item Regions



For information on exposing attributes in a region, see [Section 10.2, "Configuring Region Display Options"](#).

I cannot apply the category or perspectives I want for my new page.

Defining categories and perspectives for a page group is the first of a three-step process:

1. Create categories and perspectives.
2. Add them to the page group's list of available categories and perspectives.
3. Apply them as desired to pages, items, and other page group objects.

It may be that the page group is not configured to make the categories or perspectives available. For more information, see [Chapter 5, "Preparing to Add Content"](#).

My searches are not pulling up pages with a defined keyword.

Check the spelling of the keyword against the spelling of your search criteria.

Every time a page designer moves out of our department, someone has to go in and manually revise page contact information on all the pages in our department's page group.

There are a few things you can do to ease the situation:

- Use the Portal Smart Link *Contact* in lieu of entering the page owner's e-mail address directly on the page. Every time the page or page group's contact information is revised, all Smart Links are automatically updated. Use the default label for the contact information (*Contact*). This prevents you from having to change the name. For more information about adding a page contact, see [Section 7.6, "Specifying a Page Contact"](#).
- Consider specifying one contact at the page group level in lieu of specifying a different contact for each page. Should it be necessary, you can still enter contacts for pages where a separate contact is desirable.
- Consider setting up a role-based e-mail account and use that e-mail address for the page or page group contact. This way, the contact information is always up to date and the task becomes giving access to the e-mail account to the succession of page managers or page group managers who assume the page contact role.

There are at least five content regions on my page, yet when I try to identify one of them as the default portlet or item region, none are selectable.

Are all five regions undefined? You cannot select an undefined region as a default item or portlet region. You must explicitly make the region a portlet or item region first. For more information, see [Section 10.2.2, "Changing a Region Type"](#).

What controls are available for sub-page links regions?

Sub-page links regions have controls at the page and region levels.

At the page level, you can choose specific sub-pages to include or omit from display and you can select to display sub-page links alphabetically. These controls are on the *Optional* tab of page properties. For more information, see [Section 7.9, "Defining the Display of Sub-Page Links"](#).

At the region level, you can specify whether one or two levels of sub-pages display, provide a character to separate pages listed at the secondary sub-page level, select the attributes to display with each sub-page link, and choose the default or another icon that users click to navigate up the sub-page hierarchy. These controls are available when you edit a sub-page link region's properties. For more information, see [Section 10.2.7, "Setting Sub-Page Links Region Properties"](#).

Performing Actions on Pages

Figure 8–1 Perform Actions on One Page or Many Pages at Once



In addition to the many actions you can perform within a page, there are a number of things you can do to the entire page. This section explores those actions and explains how to carry them out. It includes the following subsections:

- [Section 8.1, "Locating Pages in Oracle Portal"](#)
- [Section 8.2, "Copying a Page"](#)
- [Section 8.3, "Moving a Page"](#)
- [Section 8.4, "Deleting a Page"](#)
- [Section 8.5, "Placing One Page Onto Another"](#)
- [Section 8.6, "Performing Actions on Multiple Pages Simultaneously"](#)
- [Section 8.7, "Troubleshooting Actions on Pages"](#)

Intended Audience

The content of this chapter is intended for users with at least the page privilege *Manage* on the pages to be acted on. If a particular task requires or can be performed

under different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges"](#).

8.1 Locating Pages in Oracle Portal

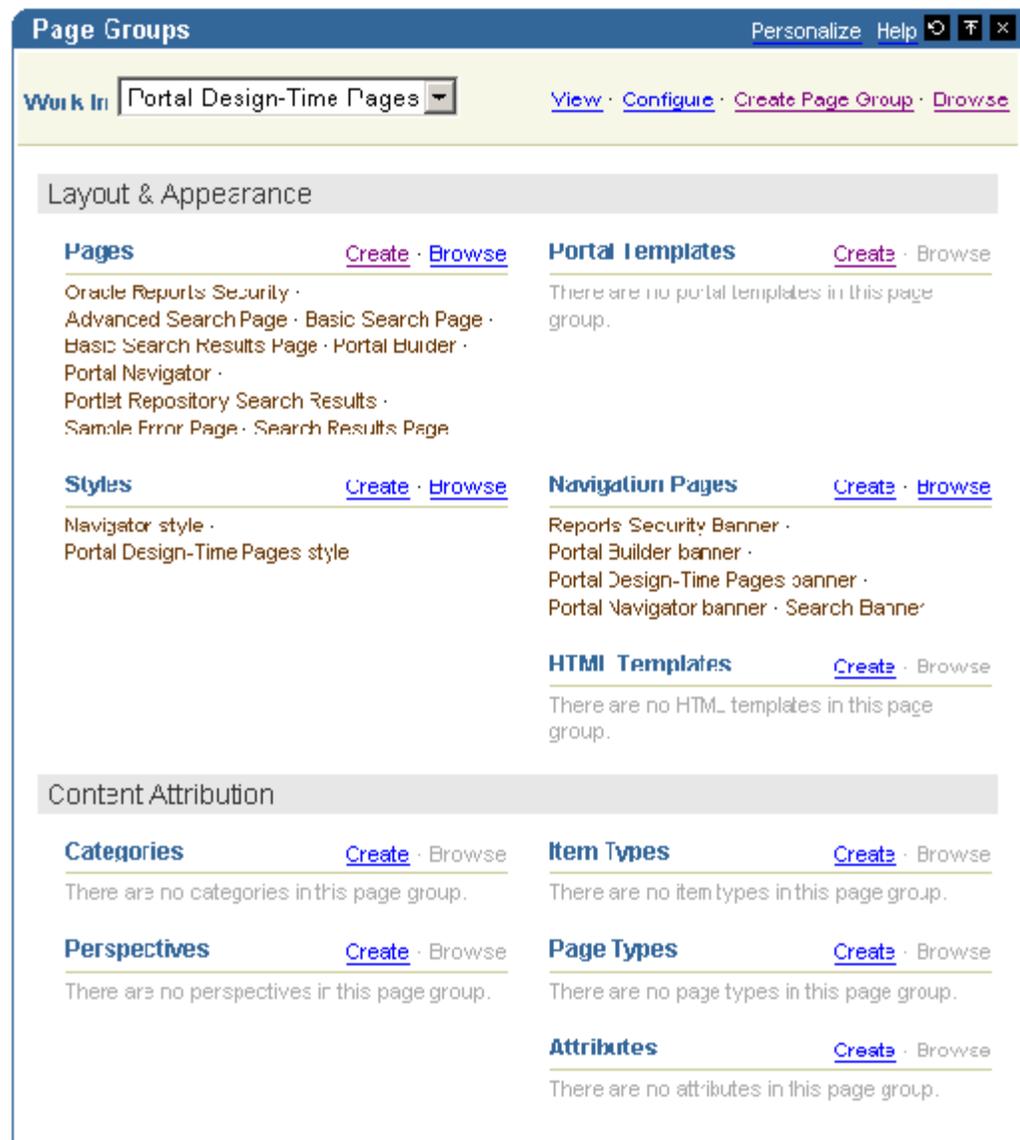
When locating pages, we recommend wherever possible that you go through the Page Groups portlet; however, in some cases, for some tasks, you will go through the Portal Navigator. This section provides information on the different ways you can locate pages, including:

- [Section 8.1.1, "Locating a Page Through the Page Groups Portlet"](#)
- [Section 8.1.2, "Locating a Page Through the Portal Navigator"](#)

8.1.1 Locating a Page Through the Page Groups Portlet

Default installations of Oracle Portal place the Page Groups portlet on the Build tab of the Portal Builder page. If you don't find it there, ask your portal administrator for the location of this portlet.

Figure 8–2 The Page Groups Portlet



To locate a page through the Page Groups portlet:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. Go to the **Page Groups** portlet.
4. From the **Work In** drop-down list, select the page group that owns the page to be located.
5. Under the **Pages** heading in the Layout & Appearance section, click the link to the page to be located.

This opens the page in Edit mode.

The Page Groups portlet can be configured to list a specific number of pages under the Pages heading. For example, it can be configured to list the first 10 pages that are available to you under a particular page group. If the page group contains more than 10 pages, a **More pages ...** link displays at the end of the list. Clicking this link is

equivalent to clicking the **Browse** link next to the Pages heading: both take you to the Portal Navigator, where all pages you have the privilege to view are listed. In the Portal Navigator, click the page link to view the page; click the Edit link to open the page in Edit mode. For information on configuring the Page Groups portlet, see [Section 15.3, "Editing and Personalizing Portlets"](#).

8.1.2 Locating a Page Through the Portal Navigator

The Portal Navigator provides a list view of all the objects owned by each page group. Where the Page Groups portlet shows all the objects in a single view, the Portal Navigator is arranged hierarchically. Users drill down, starting with a link to the page group, to sub-lists that show all object types, to the objects themselves. Much like the List view of page edit mode, the Navigator provides opportunities to perform actions on multiple objects simultaneously. For more information, see [Section 8.6, "Performing Actions on Multiple Pages Simultaneously"](#).

To locate a page through the Navigator:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the Portal Builder page.
3. In the Navigator, click the **Page Groups** tab to bring it forward.

At this point, if you wish you can enter the name of the page you want to locate in the **Find** field at the top of the tab, click **Go**, and select the page from the list of returned results.

If you're unsure of the page name, or prefer to drill to a specific page, continue with Step 4.

4. Click the page group that owns the page you want to locate.
5. On the resulting page, click the node for the type of page you want to locate:
 - a. Click the **Pages** node to locate standard, mobile, JSP, URL, and PL/SQL type pages.

If the page you want is a sub-page of one of the main pages, drill to it by clicking the **Sub-Pages** link next to its parent page.
 - b. Click the **Portal Templates** node to locate Portal Templates.
 - c. Click the **HTML Templates** node to locate HTML Templates.
 - d. Click the **Navigation Pages** node to locate navigation pages.

8.2 Copying a Page

You can save time in your page creation by using an existing page as a starting point for a new page. Use the Copy feature to copy an existing page, and then edit the copy.

You can copy a page to a different page group as long as the following are true:

- The page is not based on a local page type
- The page is not based on a local portal template
- The page does not use a local HTML page skin, local item template, local style, local category, or local perspectives
- The page's default WebDAV item types are not local item types

- The page does not use a shared item template where the parameter is a local attribute
- The page does not include a local item
- No regions on the page use local styles or local HTML content layout or include local attributes

To copy a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be copied.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Browse** link next to the **Pages** heading.
5. On the resulting Portal Navigator page, click the **Copy** link next to the page you want to copy.

If the page is a sub-page of one of the pages listed here, click the **Sub-Pages** node next to the parent page, and continue to drill down the page hierarchy until you see the page you want to copy listed in the Portal Navigator.

6. In the **Page Group Map**, click the **Copy Here** link next to the page under which you want to create the copy.

Note: You must have at least the page privilege *Manage* on the target page. You can create a copy only in the same page group as the original page.

7. Edit the value in the **Display Name** field.

Use up to 256 characters of any kind.

The default value in the Display Name field is taken from the Display Name of the source page, with the words *Copy of* added. The value is truncated to 256 characters.

Note: For more information about the rules governing the formation of object names in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

8. Select **Copy Access Control** if you want the new page to have the same privilege settings as the original page.

Note: The copy options specified for the page also apply to its sub-pages. For example, if you select **Copy Access Control**, the sub-pages' access control settings are also copied.

9. Select **Copy Sub-Pages** if you want to include the original page's sub-pages in this copy.

Copied sub-pages retain their original names.

10. Select **Copy Content** to copy the content of the original page as well as its properties.
11. Select **Copy Portlet Personalizations** to copy any personalizations that were made to the portlets on the original page.

If you do not select this option, the portlets on the new page are reset to their default settings.

Note: This option is available only when you select **Copy Content**.

12. Click **OK** to create the new page.

8.3 Moving a Page

If you want to reposition a page within your portal's page hierarchy, you can move a page to a different location within its page group. Moving a page is an efficient way to move many pages at once because moving a page also moves all of its sub-pages.

Before you can move a page, all items in that page and any of its sub-pages must be unlocked. For example, if an item on a page or any of its sub-pages is locked by a WebDAV client or is checked out by another user, you must wait until these items are unlocked or checked in before you can move the page.

To move a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be moved.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Browse** link next to the **Pages** heading.

This takes you to the Portal Navigator. If necessary, drill down the page hierarchy by clicking the **Sub-pages** link to locate the page you will move.

5. When you reach the page to be moved, click the **Move** link next to the page.

A secondary window opens and displays a map of the relevant page group.

6. In the **Page Group Map**, click the **Move Here** link next to the target page.

You must have at least the page privilege *Manage* on the target page. The target page is the page under which the page being moved is placed. Clicking the Move Here link sends the message, "Place the page I am moving immediately under this page in the page hierarchy."

8.4 Deleting a Page

Deleting a page removes the page, its sub-pages, and all the items on these pages, including items that are checked out and items in an open state, such as files currently open in a WebDAV client. Deleted pages cannot be restored.

To delete a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. In the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be deleted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Browse** link next to the **Pages** heading.
5. Click the **Delete** link next to the page you want to delete.
6. In the confirmation page, click **Yes**.

Note: All of this page's sub-pages are also deleted. Separate confirmations for sub-pages are not displayed.

When a page that is the target of a URL-based item, such as the URL or the Page Link item type, is deleted, be sure to also delete or revise the target specified for the item. Otherwise, users will likely see either an error message or a target they had not anticipated.

If you have the appropriate privileges, you can delete a sub-page by switching to Edit mode, List view, selecting one or more sub-pages, and clicking the **Delete** button next to **Actions** in the List view banner.

8.5 Placing One Page Onto Another

Oracle Portal provides ways to place one page onto another:

- Publish the page as a portlet
- Display the page through the Page portlet

When you publish a page as a portlet, it is accessible from the Portlet Repository where it can be selected for placement on other portal pages. When you use the portlet named *Page*, you can display any page—even one that has not been published as a portlet.

Both of these are ways to share content on multiple pages simultaneously while having only one page to maintain.

This section describes how to publish a page as a portlet and display a page through the Page portlet. It contains the following subsections:

- [Section 8.5.1, "Publishing a Page as a Portlet"](#)
- [Section 8.5.2, "Displaying a Page Through the Page Portlet"](#)
- [Section 8.5.3, "Selecting Page Portlet Regions for Display"](#)

8.5.1 Publishing a Page as a Portlet

Publishing a page as a portlet makes it accessible from the Portlet Repository, where it can be selected for placement on other portal pages. In default portal installations, you can find pages published as portlets under the Published Portal Content node of the Portlet Repository.

You can publish the following types of pages as portlets:

- Navigation pages
- Standard pages
- Custom pages based on the Standard page type

To publish a page as a portlet:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop down list, select the page group that owns the page to be published as a portlet.

In default portal installations, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page to be published as a portlet.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Optional** tab to bring it forward.
7. In the Publish as Portlet section, select **Publish As Portlet**.
8. Select **Use Style Of Page On Which Portlet Is Placed**, if you want the portlet to use the style that is applied to the target page rather than its own applied style.

If you do not select this check box, the page portlet uses its own applied style (see the following Note). An exception to this is when the source page is provided through the Federated Portal Adapter. In such cases, the setting to use the style of the containing page is ignored. The page portlet uses whatever style is applied to its source.

Note: Regardless of whether a page portlet or navigation page uses its source page's style, once the page portlet or navigation page is placed on a page, its headers and borders always use the style of the target page. This is true even if you do not select the **Use Style Of Page On Which Portlet Is Placed** option on the source page.

If you do not care to use the target page's header and border colors on a page portlet or navigation page, you can turn off the display of headers and borders at the region level on the target page. If the page portlet or navigation page also contains its own portlets, you must also turn off the display of headers and borders for portlet regions on the source page.

To ensure that a page portlet or navigation page uses its own background color, rather than the one specified for its host page:

1. Do not select the option Use Style Of Page On Which Portlet Is Placed for the page or navigation page that you are publishing as a portlet.
2. In the style used by the target page, clear any value from the Portlet Body Color style element and click **Apply**.

-
-
9. To use a heading for the portlet other than its source page's display name, enter the heading in the **Portlet Display Name** field.

By default, the page display name is displayed in the portlet header.

10. Click **OK** to save your changes and return to the page.

The portlet is published to the Portlet Repository. Use the Search feature in the repository to search for the portlet display name. You can also find it by clicking the **Published Portal Content** node, then the page group name to drill down through the repository to your new page portlet.

Note: Edit the page portlet's default settings to hide any unwanted page portlet regions. In page edit mode, click the page portlet's Edit Defaults icon.

8.5.2 Displaying a Page Through the Page Portlet

Use Page portlets to display the content of any page, even though the page has not been published as a portlet.

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop down list, select the page group that owns the page on which to place the Page portlet.

In default portal installations, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page on which to place the Page portlet.

This opens the page in Edit mode.

5. Go to the region in which to add the Page portlet, and click the **Add Portlet** icon (Figure 8-3).

Figure 8-3 Add Portlet Icon



This opens the Portlet Repository.

6. In the Portlet Repository, enter *page* in the **Search** field, and click **Go**.
7. In the search results list, click the Page portlet to add it to the **Selected Portlets** list, and click **OK**.
8. While still in Edit mode, click the **Edit Defaults** icon for the Page portlet (Figure 8-4).

Figure 8-4 The Edit Defaults Icon



9. On the Edit Page Portlet Defaults page, click the List icon next to the Page field (Figure 8-5).

Figure 8-5 The List Icon



10. On the resulting page, locate the page to display through the Page portlet, and click the **Return Object** link next to it.

Drill down to a page by clicking the **Expand** icon next to the page's parent page or page group.

11. Under **Page Regions**, select from:
 - **Display All Regions**, to display all the regions on the selected page.
 - **Display Selected Regions**, to display only those regions whose check box you select in the page model.

When the page displayed through a Page portlet has sub-pages with different layouts, and you navigate to those pages through the Page portlet, the Display Selected Regions setting is ignored for the sub-pages.

12. To display an Edit link on the page that is displayed through the Page portlet, select the **Display Edit Link** check box.

Displaying an Edit link enables privileged users to edit the page in place, that is, within the Page portlet. Changes made to the page through the Page portlet, are made simultaneously to the source page. For example, if you delete an item from the page through the Page portlet, the item is also deleted from the source page.

Page portlets support View mode and minimal Edit mode. This means you can perform only a limited set of operations on the page when you edit it through the Page portlet. This also limits the various Edit mode views. For example, the Page portlet provides no Pending Items Preview edit mode. Consequently, users with the page privilege *Manage Items With Approval* cannot see items with the status *Pending* when they view the page through the Page portlet.

Such users can edit the source page or add the My Approval Status portlet to the same page as the Page portlet. Users can use the My Approval Status portlet to track the progress of pending items. All the items that are not otherwise visible in the Page portlet are visible in the My Approval Status portlet until they are approved or published.

For information on which users can view items in what state, see [Section 17.9.3, "Item URL Security"](#).

13. Click **OK** to save your changes and return to the page.

Note: The Page portlet includes a parameter that, if used, requires a value in the format PAGEGROUPID_PAGEID. To make use of this on a regular container page, you must either:

- Assign a constant value, such as 6_1, directly to the Page portlet's parameter.
- Create a page parameter mapped to the Page portlet's parameter, then assign a value, such as 6_1, to the page parameter.

To obtain values for PAGEGROUPID and PAGEID, enter page Edit mode and display page properties by clicking the Page Properties icon in the toolbar at the top of the page.

When the Page parameter is specified, it overrides the page selection you made at step 10 or on the Personalize Page Portlet page. If the Page parameter is specified, any page you select when you Edit Defaults/Personalize the Page portlet are ignored.

8.5.3 Selecting Page Portlet Regions for Display

When you publish a page as a portlet, you are not restricted to displaying all regions on the source page. Once you place the portlet on a page, you can edit its default settings to specify which regions from the page portlet's source page to display.

When you choose to display selected regions, the setting applies only to the page for which you make your selection. This becomes relevant when you display selected regions on a Page portlet. For example, imagine that you publish a page through a Page portlet. The page includes a Sub-Page Links region. Within the Page portlet, when you use the Sub-Page Links region to navigate from the selected page to its sub-pages, the Display Selected Regions setting is ignored and all regions display. The Display Selected Regions setting is enforced again when you navigate back to the originally selected page through the Page portlet.

To select page portlet regions for display:

1. Log in to Oracle Portal.
2. Go to the page that contains the page portlet.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

If you do not see the page that you want to work with, you may not have the appropriate page access privileges. See your page group administrator to gain access.

3. Click the **Edit** link at the top of the page.
This displays the page in Edit mode.
4. In page Edit mode, click the page portlet's **Edit Defaults** icon ([Figure 8–6](#)).

Figure 8–6 Page Portlet Edit Defaults Icon



5. Select **Display Selected Regions**.
6. Select only those regions that should be displayed in the page portlet.
7. Click **OK**.

Note: If a Page portlet or a page that has been published as a portlet displays blank, it is likely that the portlet was edited or personalized to display a restricted number of the source page's regions. Then some change was made that broke the rule of restriction, for example, regions were added or removed from the source page's underlying template, or you navigated to a sub-page with a different region layout.

No matter the cause, you can resolve this situation by editing or personalizing the Page portlet, and selecting to Display All Regions.

8.6 Performing Actions on Multiple Pages Simultaneously

Oracle Portal provides the means of performing a single task on multiple objects at the same time. Use this feature to perform mass deletes, moves, copies, and so on in one step. The actions you can perform to multiple selections at once include:

- Deleting
- Moving
- Copying
- Changing access privileges
- Checking content out and in
- Submitting and approving or rejecting content
- Hiding or showing content

Note: You must be the page group or portal administrator, or have the appropriate privilege on the objects, to perform actions on multiple objects.

To perform actions on multiple pages simultaneously, you can either work through a page's List view or through the Portal Navigator. In the following subsections, we provide information about both methods:

- [Section 8.6.1, "Performing Bulk Actions Through List View"](#)
- [Section 8.6.2, "Performing Bulk Actions Through the Portal Navigator"](#)

8.6.1 Performing Bulk Actions Through List View

To perform bulk actions through List View:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the pages on which to perform bulk actions.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the page group's root page.

This opens the page in Edit mode.

Note: In the Page Groups portlet, the root page is distinguished by the name `<display name> root page`.

5. Click the **Editing Views: List** link in the toolbar at the top of the page.
6. In the **Select** column, select the check box next to the pages you will include in the action.

If an object does not include a check box, you do not have permission to perform an action on the object.

7. Select an action from the displayed **Actions** buttons or the Actions list, and click **Go**.

If a bulk action cannot be selected for a given set of items, then it probably means that the selected action cannot be performed over all the selected items. Review your item selection, and de-select those for which the action cannot be performed.

Actions List Options

Select one or more items or sub-pages, choose one of the following options, then click **Go**:

Note: Additional item-related selections display on this list when item level security is enabled. For more information, see [Section 17.9, "Securing Items"](#).

- **Modify Access Settings** changes the access settings for the selected sub-pages. This option does not apply to items. Select this option to add or revoke privileges, make selected sub-pages public or private, and enable or disable item level security.
- **Do not Inherit Access Settings** specifies that the selected sub-pages do not inherit their access settings from either their parent pages or the templates they are based on. With this option, you are removing the inheritance of privileges and changing the privilege model to one where individual privileges must be specified for sub-pages. This option does not apply to items.
- **Inherit Access Settings from Parent** specifies that the selected sub-pages inherit their access settings from their parent page. This option does not apply to items.
- **Inherit Access Settings from Template** specifies that the selected sub-pages inherit their access settings from any Portal Template they are based on. This option does not apply to items.
- **Expire** expires the selected items. This option does not apply to sub-pages.
- **Un-Expire** restores the selected previously-expired items. This option does not apply to sub-pages.
- **Show** displays the selected hidden items. This option does not apply to sub-pages.
- **Hide** hides the selected items. This option does not apply to sub-pages.
Hiding an item does not remove it from the page, but merely prevents it from displaying when users view the page. You can still see the item when its host page is in Edit mode, where you can choose to show the item again.
- **Submit for Approval** provides options for submitting one or more draft items for approval in the List view. All selected items must have a status of *Draft* for this action to execute successfully. Submit for Approval is specifically for submitting items when item versioning is not turned on. Choose from:
 - **New version, but not current** to submit for approval all selected items. If approved, the items are stored with the other versions of the item but are not exposed as the current version.
 - **New current version** to submit for approval all selected items. If approved, the items are stored with the other versions of the item and are exposed as the current version.
 - **Overwrite if exists** to submit for approval all selected items when item versioning is set to Simple. If approved, the items overwrite any other version of the item and are exposed as the current version.

Note: *Submit for Approval* and *Overwrite if exists* are functionally the same. Submit for Approval has meaning when there is no versioning. Overwrite if exists has meaning if versioning is set to Simple.

- **Approve/Reject** approves or rejects all selected items. All selected items must have a status of *Pending* for this task to execute successfully. Clicking **Go** invokes a pop-up window where the approver may enter comments and click an *Accept*, *Reject*, or *Cancel* button.
- **Check Out/Check In** checks out (or in) all selected items. **Enable Item Check Out** must be activated for all selected items, all selected items must be checked out, and all items must have a status of *Active* for this task to execute successfully.

You can add a Checkable column to your List view when you configure edit modes in the page group's properties. The Checkable column shows whether check-out is enabled for an item.

None of these options apply to tabs because tabs are not selectable in List view. None of these options apply to portlets because portlets are not represented in List view.

8.6.2 Performing Bulk Actions Through the Portal Navigator

To perform bulk actions through the Portal Navigator:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. Click the Navigator link at the top of the page.
If your view of the Portal Builder page does not include the Navigator link, ask your page group or portal administrator for access to the Navigator.
4. In the Portal Navigator, click the link to the page group that owns the pages on which to perform bulk actions.
5. On the resulting page, click the **Pages** node.
6. Click the **actions** link in **Perform actions on multiple objects simultaneously**.
7. On the resulting page, select the pages you want to change, then select an action.

For an explanation of possible actions, see "[Actions List Options](#)" in the previous sub-section.

If an object does not include a check box, you do not have permission to perform an action on the object.

8.7 Troubleshooting Actions on Pages

I cannot find a page in the Page Groups portlet.

One of a few things might be happening:

- You may not have any privileges on the page. You must have at least the page privilege *View* on the page, or the page must be public for you to see it in the Page Groups portlet. Request access privileges from the page group or portal administrator.
- The maximum number of pages to display may have been reached, in which case, click the **More** link at the end of the list of pages.
- Verify that you have selected the correct page group from the **Work In** drop-down list.

I'm seeing double listings of pages in a page group in the Page Groups portlet.

Someone may have given the same display name to another page. Display name uniqueness is not enforced in Oracle Portal. Name uniqueness is enforced. Edit page properties for both pages and note that while their Display Names are the same, their Names are not.

Another possibility is that a page was copied along with its sub-pages. Copies of sub-pages retain the same Display Names as their source sub-pages. Provided you have the privilege to do so, edit page properties and rename the sub-pages.

When I try to move a page, I get an error.

It may be that an item on the page or one of its sub-pages is either checked out of the portal or locked by a WebDAV client. In such cases, you must wait until these items are checked in or unlocked before you can move the page and its sub-pages.

My page portlet is using the style of the target page rather than the style of its source page, as I have specified.

Page portlets always take their header and border colors from the page on which they are placed. This is because the display of headers and borders is controlled on the target page, rather than from any values set for the source page's style.

One way around this is to edit the region in which the page portlet is placed and turn off the display of portlet headers and borders. If the page portlet contains its own portlets, you must also turn off the display of headers and borders for regions on the page portlet's source page.

For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

Portlet background colors usually are specified by the style that is applied to the page on which the portlets are placed. With a page portlet, there is a way to display the source page's background color. Edit the style that is applied to the page on which the page portlet is placed (the target page). For the style element Portlet Body Color, remove the value from the Background Color field, and click Apply. The background color specified for the page portlet's source page (that is, Background Color property of the Common style element) displays.

To illustrate this for yourself, create a page named *Source* and a page named *Target*. Create a *Source Style* for the Source page and a *Target Style* for the Target page. Set all the color values for Source Style to the red end of the color palette. Set all the color values for Target Style to the blue end of the color palette.

Tip: When you edit styles, a quick way to move from style element property to style element property is to click the style element property in the Preview section of the Edit Style page. This selects the style element property and displays all of its values for editing

Add some portlets and items to the Source and Target pages. Publish the Source page as a portlet. Place the Source page portlet onto the Target page.

For the Source page, experiment with selecting and de-selecting **Use Style Of Page On Which Portlet Is Placed**, and viewing the result on the Target page. Also, experiment with specifying and clearing the value field for the **Background** property of Target Style's **Common** style element.

My page portlet is not using the style of the container page, as I specified.

When you publish a page as a portlet, you are given the opportunity to use the source page's style or to use the style of the containing page. Using the style of the containing page works in most cases. The exception is when the source page is provided through the Federated Portal Adapter. In such cases, the setting to use the style of the containing page is ignored. The page portlet uses whatever style is applied to its source.

I want my page portlet's background color to be the color specified for the page portlet's source page.

This involves editing a style, so you must be sure others who use the style agree with the change:

1. Go to the page portlet's source page, and edit its properties.
2. On the Optional tab, clear **Use Style Of Page On Which Portlet Is Placed**.
3. Edit the style that is applied to the target page, where the page portlet is placed.
4. Clear any value specified for the Portlet Body Color element.

Be sure to click Apply.

The page portlet displays with the same background color as its source page.

I want to publish a page as a portlet, but I don't want every region on the source page to display.

1. Go to the page on which the page portlet is placed.
2. Click the page portlet's **Edit Defaults** icon.
3. Select **Display Selected Regions**.
4. Check only those regions that should be displayed in the page portlet.
5. Click **OK**.

I cannot see the status of my items in List view.

The columns that display in page Edit mode, List view, are configured at the page group level (by the page group administrator or the portal administrator). You must have at least the page group privilege *Manage All* to revise List view.

To change the columns that appear in List view:

1. Edit page group properties for the page group under which the relevant page was created (the *page group*).
2. Click the **Configure** tab to bring it forward.
3. Click the **Edit** link under **Edit Modes**.
4. Under **List View Column Selections**, move column names between **Hidden Columns** (to hide column names) and **Visible Columns** (to display column names).

To display the status of an item, move the Status column to the Visible Columns list. Status entries include *Active*, *Pending*, *Rejected*, *Draft*, *Deleted*, *Hidden*, and *Expired*.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

I published a page as a portlet, placed it on a page, and displayed selected regions. Now it is displaying blank.

This involves the source page and a Portal Template. When you edit or personalize the Page portlet to display selected regions, and a change is made to the portlet's source page regarding the template—either a template is added or detached or a template region equivalent to a region selected for display on the portlet is deleted—the portlet cannot resolve such changes with its Display Selected Regions setting. The result is that the portlet displays without content—or blank. To resolve this situation, re-edit or personalize the portlet's region display settings.

To personalize a portlet, in page View mode click the Personalize link in the portlet header. For more information on restricting the display of regions in a page portlet, see [Section 8.5.3, "Selecting Page Portlet Regions for Display"](#).

I selected a page for my Page portlet, but it is being ignored.

It may be that a Page parameter value is being passed to the portlet, in which case it overrides any page you select when you edit or personalize the Page portlet. When the Page parameter is specified, any page selection you make when you Edit Defaults/Personalize the Page portlet are ignored.

I could not perform a bulk action on a group of selected items.

If a bulk action cannot be selected for a group of items, then it probably means that the selected action cannot be performed over all the selected items. Review your item selection, and de-select those for which the action cannot be performed.

I want to copy a page to a different page group but no other page groups are listed in the Page Group Map.

There are various restrictions for copying pages across page groups. For more information, see [Section 8.2, "Copying a Page."](#)

By default, when you create a page, a local style is created and used for the page. You may need to assign a different style to a page before you can copy it to a different page group.

Working with Pages Designed for Mobile Devices

In Oracle Portal, you can create *mobile pages* specifically for mobile devices, such as cell phones. Note that standard pages can also be viewed on mobile devices. However, to provide page designers with more control over the appearance of pages displayed on mobile devices, Oracle Portal enables you to set up mobile pages specifically for display on the small screens of such devices.

This chapter describes mobile support in Oracle Portal and explains how to set up and manage mobile pages in Oracle Portal. It includes the following subsections:

- Section 9.1, "Mobile Support in Oracle Portal"
- Section 9.2, "Creating a Mobile Page"
- Section 9.3, "Adding Content to a Mobile Page"
- Section 9.4, "Personalizing Mobile Pages"
- Section 9.5, "Viewing Standard Pages on Mobile Devices"
- Section 9.6, "Adding MobileXML to Oracle Portal Pages"
- Section 9.7, "Viewing Oracle Portal Pages from a Mobile Device"
- Section 9.8, "Using the OracleAS Wireless Debugger/Simulator"
- Section 9.9, "Troubleshooting Mobile Pages"

Intended Audience

The content of this chapter is intended for users with at least the *Manage* privilege on the pages they work with. If a particular task requires or can be performed under different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges"](#).

9.1 Mobile Support in Oracle Portal



Oracle Portal uses Oracle Application Server Wireless to process requests from wireless devices, and transform content provided by the portal into an appropriate format. To enable mobile access in your portal, your portal administrator must configure how Oracle Portal uses OracleAS Wireless (**Global Settings: Mobile tab**). For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*. You'll find this guide on the Oracle Portal documentation page of the Oracle Technology Network at

<http://www.oracle.com/technology/products/ias/portal/documentation.html>.

What Is a Mobile Page?

A mobile page is a page that is specifically designed for display on a mobile device. Mobile pages present information in a hierarchical tree structure. The structure is defined by levels. Any level, including the top level, can contain any number of portlets, items, and levels. This provides the flexibility to represent a large amount of content, yet limits the list displayed at any one time to fit the limited display sizes of most mobile devices.

Things to Consider Before You Create a Mobile Page

Some things to consider before you create mobile pages:

- If you use standard pages exclusively, they may not display optimally on the small screens available on mobile devices. On the other hand, if you decide to create a standard and a mobile version of pages, you'll end up maintaining two sets of portal pages.
- If you anticipate any mobile access, be sure to test how your standard pages will look on mobile devices. Go to your standard page and click the **Mobile: Preview** link in the toolbar at the top of the page (in Edit mode).
- Some Oracle Portal features are not available on mobile pages such as item versioning, item level security, and approval chains.

Mobile-Enabled Content

Any standard page can be displayed in a mobile device but only mobile-enabled content is displayed. When editing a standard page, page designers can preview how the page will look in a mobile device by clicking the **Mobile: Preview** link in the toolbar at the top of the page.

The structure of the standard page is flattened into a list of mobile-enabled portlets and items from which users can make selections. Any tabs on the page are converted into levels, which allow users to drill down and view more content. For more detail, see [Section 9.5, "Viewing Standard Pages on Mobile Devices"](#).

Mobile-enabled portlets are those portlets capable of handling MobileXML. It's easy to know which portlets are mobile-enabled by noting which portlets are available in the portlet repository when you add a portlet to a mobile page.

Mobile-enabled items include any items based on BaseURL, BasePageLink, and BaseSubPageDisplay. This means the item types potentially available for mobile pages include Simple URL, URL, Wireless URL, Simple Page Link, Page Link, Login/Logout Link and SubPage Display.

See also [Section 9.3, "Adding Content to a Mobile Page"](#).

9.2 Creating a Mobile Page

Mobile pages provide a way to design pages to display portlets and items specifically within mobile devices, such as cell phones. Standard pages can also be displayed in mobile devices; however, the standard page design environment is more suited to creating pages for larger display devices, such as computer monitors.

If you base your mobile page on an existing standard page, the layout of the existing page is flattened so that it is more suitable for display on mobile devices:

- The standard page is examined and its regions are processed in a logical order.
- The mobile content in these regions is copied to the new mobile page. Non-mobile content is not copied over to the new mobile page. Non-mobile content includes

any portlets that are not mobile-enabled, and any item types that are not based on the BaseURL, BasePageLink, and BaseSubPageDisplay item types.

- The portlet personalizations on the mobile portlets are shared between the standard page and the mobile page. This means that any personalizations made to either page affect the other page. For example, if a user personalizes a stock portlet on a page with a specific portfolio, and that page was used as the initial content for a mobile page, then the user will see the same personalizations on the mobile page. Even though the portlets are shared, they will not be listed in the Portlet Repository.
- Any tabs on the standard page are converted into levels on the new mobile page.
- The access control settings on the standard page are copied to the new mobile page. You can edit the mobile page to change these settings later. Privileges that do not apply to mobile pages are converted as follows:
 - *Manage Items With Approval* becomes *Manage Content*
 - *Manage Style* becomes *Personalize Portlets (Full)*
 - *Personalization (Style)* becomes *View*

Note: To create a page, you must have the *Create* global privilege on All Pages, and at least the *Manage* privilege on the parent page of the new page.

To create a mobile page:

1. In Oracle Portal, click the **Build** tab to bring it forward.
2. Go to the Page Groups portlet, and select a page group that will own the new page from the **Page Group** drop-down list.
3. Click **Create a Page**.
4. In the **Page Type** list, choose **Mobile**.
 If **Mobile** is not included in this list, the Mobile page type is not included in the page group. If you have administrative privileges, you can add this type to the list of available types by clicking the **Configure** link next to the **Page Type** field. Use this to configure the page group that owns this page to include the Mobile page type.
5. In the **Display Name** field, enter a descriptive name for the page.
 Use up to 256 characters of any kind, including spaces. This is the name that is displayed in the Portal Navigator.
6. (Optional) In the **Description** field, enter a description for the page.
 Use up to 2000 characters. The description is displayed only when you edit the page. It does not appear to the user.
7. Select a page caching option.
 For more information, see [Section 21.1, "Page Caching"](#).
8. Click **Next**.
9. Select:
 - **Blank Page** to create a blank mobile page.

- **Base On Existing Page** to populate the mobile page with the same content as an existing page.

Click the **Browse** icon next to the **Existing Page** field, and the **Return Object** link next to the page you will use as the starting point for your mobile page.

Note: You can base a mobile page only on a Standard page. If you want to create a new mobile page based on an existing mobile page, copy the mobile page, then edit the copy.

10. Click **Next**.

11. (Optional) Select **Display Page To Public Users** if you want everyone, including users who are not logged in to the portal, to be able to view the page.

When this option is selected, the page becomes a crawlable data source for Oracle Ultra Search. See also *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at

<http://www.oracle.com/technology/products/ias/portal/documentation.html>.

12. (Optional) To explicitly grant privileges to specific users or groups:

- a. In the **Grantee** field, enter the name of the user or group you will allow to access this page.

Alternatively, click the **Users** or **Groups** icon, and select from the list provided.

Note: Oracle Portal uses the Oracle Internet Directory for identity management, serving as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (for example, John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal's locally defined groups.

- b. In the list, choose a privilege level.

Alternatively, click the **Users** or **Groups** icon, and select from the list provided.

Note: If you based your mobile page on an existing page, the new page uses the same access settings as the existing page. You can change these settings later. Privileges that do not apply to mobile pages are converted as follows:

- *Manage Items With Approval* becomes *Manage Content*
 - *Manage Style* becomes *Personalize Portlets (Full)*
 - *Personalization (Style)* becomes *View*
-
-

c. Click **Add**.

13. Click **Finish** to create the page.

If you based your mobile page on an existing page, and the existing page is complex, the page creation process may take a while as the existing page is converted into a layout more suited for display on mobile devices. When you click the **Finish** button, you are given the opportunity of continuing the page creation process in the background so that you can move on to other tasks. If you attempt to edit the mobile page before it is completed, a pop up window will inform you that the page is not yet complete.

If you add a portlet to a page that was used as the starting point for a mobile page, that portlet will not appear on the mobile page. If you want the portlet to also appear on the mobile page, you must add it to the mobile page. Additionally, if you want to share any personalizations made to the portlet between the two pages, you must explicitly share the portlet on one page, and then add that shared portlet instance to the other page. For more information, see [Section 15.7, "Sharing a Portlet Across Multiple Pages"](#).

9.3 Adding Content to a Mobile Page

Whilst mobile and standard pages are accessible from a mobile device, portlets need to be specifically mobile enabled by the portlet developer so that the portlet can produce OracleAS Wireless XML as required.

Similarly, only a subset of items are mobile enabled. You can add any item type that is based on BaseURL, BasePageLink, and BaseSubPageDisplay. This means the item types potentially available for mobile pages include Simple URL, URL, Wireless URL, Simple Page Link, Page Link, Login/Logout Link and Sub Page Display. This also means that any item types that users create that are based on these types are also potentially available for adding to mobile pages. For example:

- Simple URL items - link the mobile user away from the portal, to a Web site in an appropriate markup language for the device being used, for example, WML, HDML, or XHTML.

Mobile devices receive Simple URLs unchanged so the target (defined in the Simple URL link) must be able to support the mobile device.

- Wireless URL items - link the mobile user away from the portal, to a Web site that supports OracleAS Wireless XML (rather than device-specific markup such as WML, HDML, or XHTML).

The portal's OracleAS Wireless service rewrites the URL of a Wireless URL item before sending it to the mobile device. Therefore, the target of the Wireless URL must support MobileXML, that is, be a valid target for OracleAS Wireless.

- Simple Page Link items - link the user to another Oracle Portal page in the same portal.
- Sub-Page Display items - display a menu of subpages for the current page. When users select a subpage, they navigate to that subpage. Only one subpage level is displayed.

Note: To add content to a mobile page, you must have at least the *Manage Content* privilege on a level within the mobile page.

To add content to a mobile page:

1. Go to the mobile page you will work with.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

2. Click **Edit**.
3. Click the **Add Portlet** icon to add a portlet to the page.

Navigate through the Portlet Repository to find the portlet you want to add. Only mobile enabled portlets are displayed. Click the portlet name, then click **OK**. In the mobile page's Edit mode, click **Edit Defaults** next to a portlet to change the portlet properties.

Note: You can add only mobile-enabled portlets to mobile pages. If you publish a page as a portlet, and if that page does not contain any mobile-enabled portlets, URL items, Page Link items, or tabs, it will not appear as a mobile-enabled portlet. Furthermore, as the value of page portlets for mobile portals is limited and their behavior not intuitive, we recommend that you do not use page portlets when building mobile portals.

You can use a mobile device to access a portal page that contains a page portlet within another page portlet. However, when a user navigates to the inner page portlet, it may not be possible to navigate back without going back to the Home page. The **Back** link context is lost when page portlets are nested on mobile pages and when you view a standard page on a mobile device.

4. Click the **Add Item** icon to add an item to the page.

Once an item has been added to a page, click the **Create** or **Edit** link next to an item to create a new item or change the item properties.

5. Click the **Add Level** icon to add a level to the page.

A level is displayed on the page as a link that users can click to drill down to more content. Levels provide the flexibility to represent a large amount of content while limiting the displayed list to fit the small display sizes of most mobile devices.

6. Organize how the content appears on the mobile page:

- Click the **Level Properties** icon to change the name of the level, or to specify who can access a particular level.

Levels are the equivalent of tabs on a standard page, and the same access rules apply; see [Section 17.6, "Securing Tabs"](#) for more information.

- Click the **Rearrange** icon to rearrange the order of portlets, items, and levels within the current level.
- Select the check box next to one or more portlets, items, and levels and click **Hide** to hide them on the page.
- Select the check box next to one or more hidden portlets, items, and levels (displayed in gray) and click **Show** to show them on the page.
- Select the check box next to one or more portlets, items, and levels and click **Delete** to remove them from the page.
- Select the check box next to one or more portlets and items, and click **Move** to move them to a different level of the page.

Note: You cannot move levels.

- Select the check box next to one or more portlets, and click **Share** to make these particular instances of the portlets available to other pages.

For more information, see [Section 15.7, "Sharing a Portlet Across Multiple Pages"](#).

Here is an example of a mobile page with two levels, one called My Level, and one called Inner Level.

Figure 9–1 Sample Mobile Page

[Edit Mobile Page](#) [Mobile Home](#) > [Page](#) [Go to Page](#) [Home](#) [Builder](#) [Navigator](#) [Help](#)

Editing Views: [Edit](#) [View Page](#)

Page Group: [Properties](#) Mobile Page: [Properties](#) [Access](#) Create: [Sub-Pages](#)

Actions: [Show](#) [Hide](#) [Delete](#) [Move](#) [Share](#)

Mobile Home Page			   
<input type="checkbox"/>	MobileXML Portlet	Edit Defaults	Item Attributes
<input type="checkbox"/>	My Level		   
<input type="checkbox"/>	Hello World Portlet	Edit Defaults	Item Attributes
<input type="checkbox"/>	Lottery Portlet	Edit Defaults	Item Attributes
<input type="checkbox"/>	Inner Level		   
<input type="checkbox"/>	Simple URL to Oracle.com		Item Attributes

9.4 Personalizing Mobile Pages

When you preview a mobile page in Oracle Portal, a *Personalize* link is displayed at the top of the page. When you click this link, you see personalization options that are very similar to the options available in Edit mode, except that fewer options are available. For example, it is not possible to share a portlet when personalizing a mobile page.

It is possible to add new portlets and levels to the page, and rearrange the portlets, items, and levels. It is also possible for the user to hide, show, and delete portlets, items, and levels. The user cannot add new items, or move levels into other levels.

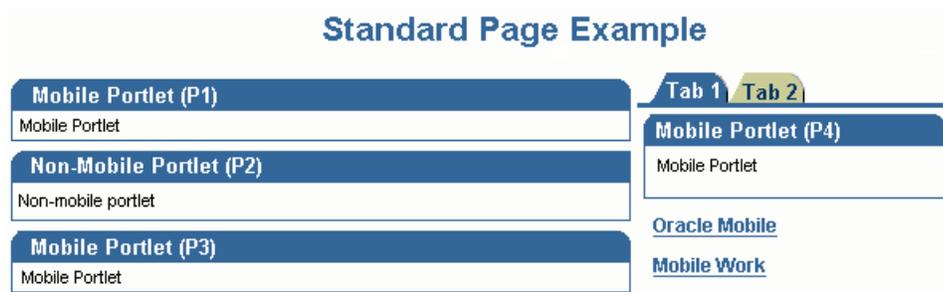
It is not possible to personalize mobile pages or the portlets from the mobile device.

9.5 Viewing Standard Pages on Mobile Devices

Although standard pages are accessible from a mobile device, only mobile-enabled portlets and items are displayed. Non-mobile portlets are not displayed.

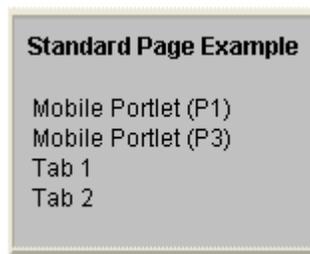
When you view a standard page from a mobile device, the page structure is flattened into a set of menus, one of which is displayed in the mobile device at a given time. Every object on a page becomes a link in a menu. Consider the example shown here:

Figure 9–2 Sample Standard Page



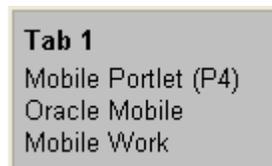
If portlets P1 and P3 are mobile enabled but P2 is not, the menu displayed on the mobile device looks like this:

Figure 9–3 Sample Standard Page Viewed on a Mobile Device



If you select a portlet link, the portlet content is displayed on the mobile device. If you select a tab link, another menu is displayed to represent the content on the tab. In this example, Tab 1 contains one mobile portlet (P4) and one item region with a Simple Page Link item to the page 'Mobile Work' and a Simple URL item to 'Oracle Mobile'. When you click the **Tab 1** link the mobile device displays:

Figure 9–4 Standard Page Tab Viewed on a Mobile Device



Only tabs containing mobile content are displayed on mobile devices.

Mobile preview of a standard page

If you have *Edit* privileges on a standard page, a **Mobile Preview** link is displayed at the top of the page. When you click this link, you see an overview of how the page will look when it is browsed on a mobile device. You can navigate the page by drilling down into tabs, subpages, and portlets. Use the breadcrumbs to navigate back up the page structure.

9.6 Adding MobileXML to Oracle Portal Pages

MobileXML is well-formed XML that conforms to the OracleAS Wireless MobileXML DTD. The OracleAS Wireless gateway transforms MobileXML generated by Oracle Portal portlets into device-specific markup (such as tinyHTML and WML).

A MobileXML portlet is provided in the Oracle Portal Portlet Repository. You can use this portlet to record MobileXML content for display on mobile devices. For example, a *Contact Us* portlet might display this MobileXML:

```
<SimpleText>
  <SimpleTextItem>
    For more information, call our sales team on 1.800.SALES
  </SimpleTextItem>
</SimpleText>
```

The following steps describe how to add the MobileXML portlet to both standard and mobile pages. For more information on MobileXML and the MobileXML DTD, see the Oracle Application Server Wireless documentation on the Oracle Technology Network, http://download.oracle.com/docs/cd/B14099_19/wireless.htm.

To add or edit the MobileXML portlet:

1. Navigate to the page on which you want to add the MobileXML portlet.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Click the **Add Portlet** icon in the region in which you want to add a portlet.
If you are adding the portlet to a mobile page, choose the **Add Portlets** icon in the level in which you want to add the portlet.
3. Enter *MobileXML* in the Search field and click **Go**.
If you have the appropriate privileges to access this portlet, it is displayed.
4. To add a portlet to your page, click the portlet name, and then click **OK**.
5. Click the Edit Defaults icon associated with the portlet.
If you are working on a mobile page, click the **Edit Defaults** link for the portlet.
6. Enter a different **Short Display Name** for the portlet. The default is **MobileXML Portlet**.
This name is used when the portlet is displayed on pages on the desktop.
7. Enter a different **Display Name** for the portlet. The default is **MobileXML Portlet**.
This name is used when the portlet is displayed on a mobile device.
8. Click **Display Portlet Header** to display the portlet header and the text supplied in the **Display Name** field. Clear the check box to suppress the header.

The portlet header displays only on pages on the desktop, not on the mobile device.

9. In the **Content** text box, enter MobileXML content for this portlet. If you do not use MobileXML tags, the content appears as plain text without any formatting.

It is recommended that the content block does not exceed 2000 characters due to the limitations of some mobile devices.

9.7 Viewing Oracle Portal Pages from a Mobile Device

This section describes step by step, how to access Oracle Portal from a mobile device:

- [Section 9.7.1, "Step 1 Acquire a mobile device"](#)
- [Section 9.7.2, "Step 2 Configure mobile access for Oracle Portal"](#)
- [Section 9.7.3, "Step 3 Make mobile content available on Oracle Portal pages"](#)
- [Section 9.7.4, "Step 4 Configure a home page for mobile users"](#)
- [Section 9.7.5, "Step 5 Contact Oracle Portal from a mobile device"](#)

9.7.1 Step 1 Acquire a mobile device

Although access to a portal from an actual mobile device is, in essence, identical to access from a mobile simulator (you just enter a URL into the device), the simulator option allows portal developers to see, more quickly, how Oracle Portal displays pages and portlets on mobile devices.

There are many reasons that the early phases of developing a mobile-enabled portal with Oracle Portal is best performed with the use of a mobile device simulator:

- Lower access costs than full wireless access
- More controlled access to the portal within company firewalls
- Quicker response times over a local network
- Less hardware to purchase and support.

Most major mobile device companies, keen to get developers writing mobile applications, offer free simulator software for their devices. For legal reasons this software should generally be downloaded from the suppliers' respective sites, for example, OpenWave.com, Nokia, Ericsson, Palm, and so on. Different suppliers require different levels of registration prior to downloading their simulator software.

Some simulators can be installed on a standard PC and operate over a local intranet. Some other simulators connect to a public server hosted by the supplier, which therefore requires public Internet access to your development portal. As mobile device companies regularly update their simulators in line with their available hardware, ensure that you check the latest simulator requirements for access to an intranet-only-accessible portal.

9.7.2 Step 2 Configure mobile access for Oracle Portal

In a default Oracle Portal installation, mobile access to the portal is enabled. To prevent users from accessing the portal from mobile devices, your portal administrator can disable this feature. To verify the mobile access policy in your portal and check that OracleAS Wireless is properly configured, see *Enabling Mobile Access* in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*. You must be the portal administrator to do this.

Portal administrators can set other global options that impact mobile access throughout your portal.

- Exclude the Login link displayed on mobile home pages.
- Display page titles in navigation link text, instead of the text *Home* and *Back*.
- Enhance page layouts for PDAs (Personal Digital Assistants) and set PDA display options such as fonts, colors and banner images.
- Enable mobile portlet content logging.
- Specify the OracleAS Wireless Portal Service URL.

9.7.3 Step 3 Make mobile content available on Oracle Portal pages

To test mobile access in your portal, start by creating a simple mobile page containing the mobile-enabled portlet *MobileXML*. When you create the mobile page, set the option **Display Page To Public Users** as described in [Section 9.2, "Creating a Mobile Page"](#).

The MobileXML Portlet is located in the Portlet Repository, under Portlet Builders, Additional Portlet Builders. If you are not sure how to add portlets to mobile pages, see [Section 9.3, "Adding Content to a Mobile Page"](#).

Edit the default content of the MobileXML portlet as follows:

1. Click the Edit Defaults icon beside the portlet.
2. Enter the following text as the actual content of the portlet, or enter your own OracleAS Wireless XML if you prefer.

```
<SimpleText>
  <SimpleTitle>
    Mobile Portlet Content
  </SimpleTitle>
  <SimpleTextItem>
    This portlet uses a short sample of the markup
    that can be used in a mobile portlet.
    The markup can be used to describe:
  </SimpleTextItem>
  <SimpleTextItem>
    Forms : &lt;SimpleForm>
  </SimpleTextItem>
  <SimpleTextItem>
    Tables : &lt;SimpleTable>
  </SimpleTextItem>
  <SimpleTextItem>
    Menus : &lt;SimpleMenu>
  </SimpleTextItem>
  <SimpleTextItem>
    Links : &lt;SimpleHref>
  </SimpleTextItem>
  <SimpleTextItem>
    Plus many more useful user interface items.
    However, unlike HTML this mobile markup is
    strict XML, so more care has to be taken
    when using it.
  </SimpleTextItem>
</SimpleText>
```

3. Click **OK** to return to the page.

4. Click **View Page** to preview the mobile page.

This view provides a good indication of how the page will look when it is displayed on a mobile device.

9.7.4 Step 4 Configure a home page for mobile users

Although it is not mandatory, we recommend that you specify a home page to be displayed when you access Oracle Portal from a mobile device. The mobile home page is independent from the desktop home page. See [Section 2.1.4, "Choosing Your Home Page"](#).

The *Mobile Home Page* setting is also a convenient way to access new mobile pages during testing.

9.7.5 Step 5 Contact Oracle Portal from a mobile device

To contact Oracle Portal using a mobile device, use the same URL that you would use to access the portal from a desktop browser, that is, use the form:

```
http://<host>:<port>/portal/page/<dad>
```

Oracle Portal detects the non-html access and redirects the mobile device to the OracleAS Wireless Service URL (specified on the Mobile tab of the Global Settings page). See also [Section 9.7.2, "Step 2 Configure mobile access for Oracle Portal"](#).

Some mobile devices and simulators do not properly support redirection. In these cases the mobile device may display some form of error. To work around this problem enter the OracleAS Wireless Service URL (mentioned previously) directly into the mobile device.

The mobile home page is displayed in the mobile device; the page title is shown, together with links to the portlets on the page. In the sample page you created in Step 3, there will be just one portlet link displaying the portlet's Short Display Name. Click the portlet link to view the portlet content in the mobile device.

As stated earlier, accessing a portal from a real mobile device rather than a simulator is a matter of network configuration rather than Oracle Portal or OracleAS Wireless server configuration. If the network is correctly configured (generally involving access from the Internet to some machine on an intranet), these steps remain the same.

9.8 Using the OracleAS Wireless Debugger/Simulator

The OracleAS Wireless server has a basic built-in debugger that includes a simulator. You can access the debugger from OracleAS Wireless by:

- Clicking the test button of the portal service, or
- Choosing to debug the portal service.

The simulator looks and behaves like a PDA, and offers nothing more than simple browsing capabilities.

The simulator is part of the service debugging process that enables you to choose which *device http headers* the simulation passes on to Oracle Portal (the simulator does not change to look like the chosen device, but the headers sent to Oracle Portal will differ). This enables you to send requests to Oracle Portal as if they are coming from a PDA and then to send requests to Oracle Portal as if they were coming from a mobile phone. This may be useful if you want to check portlets that are set up to display markup targeted at specific devices.

If caching is enabled for the Oracle Portal page you are debugging, do not switch device types while using the OracleAS Wireless debug tool. If you need to switch device types, exit the tool, clear out any cookies, and then log back in to the OracleAS Wireless debug tool and continue your tests. If you do not, the Portal cache may contain contradictory information and this can result in unexpected behavior.

9.9 Troubleshooting Mobile Pages

Page portlets do not display properly on my mobile device.

The value of page portlets for mobile portals is somewhat limited. Given that the behavior of page portlets on mobile devices is not intuitive, it is best to avoid the use of page portlets when building mobile portals.

I receive a Service Error message

If you receive the message while logging in to Oracle Portal, see the section above. If the error occurs at any other time, you will need to investigate the behavior of the OracleAS Wireless server.

To start with, determine if any service can be run on the server. For example, can the OracleAS Wireless examples be executed from a mobile device or simulator? If not, then it is likely that there is a configuration problem with the installation in general.

If the OracleAS Wireless examples work then review the contents of the `sys_panama.log` error log for the OracleAS Wireless server. This log file is located in either `ORACLE_HOME/wireless/logs` or `/var/tmp`. The log file records information about the response from the services causing problems (Oracle Portal in this case) and so shows if they are returning error statuses or invalid OracleAS Wireless XML. You can then correlate this information with the `access_log` of the Oracle HTTP Server process to find which requests are failing (for example, a servlet request or a `mod_plsql` request). Depending on the findings of this research it may be necessary to contact your support representative.

I receive the following error message: A Temporary Error Has...

This error message is rendered by the Parallel Page Engine (PPE). The PPE is sufficiently mobile aware to render error documents of type `text/vnd.oracle.mobilexml` in the event of an error. The PPE is most exposed to errors when it is attempting to fetch the page metadata from the database. There is generally information in the metadata telling the PPE how to handle errors, but if the database's response to the PPE's request for metadata is not a valid metadata document, or an explicit error document, then the PPE must act on its own to render an error document for the user.

When rendering error documents for standard desktop browsers the PPE simply takes the error document that resulted from the metadata call to the database and passes it to the end user. Desktop browsers can handle numerous content types, and for the content types that they cannot handle they will generally prompt for the document to be saved to disk. However, in the case of a mobile user this is probably not appropriate or even possible. Therefore error documents for mobile requests must be in OracleAS Wireless XML.

Thus, if the PPE is servicing a mobile request and the database renders an error document, rather than metadata, that is not valid OracleAS Wireless XML the PPE:

- Writes the document into the `WLS_PORTAL-diagnostic.log` (`MW_HOME\user_projects\domains\\servers\WLS_PORTAL\logs`).

- Assigns a unique ID number to the error.
- Passes a standard error template to the user saying "A temporary error has prevented Oracle Portal from servicing your request. (id=<nnnnn>)".

If a user reports such a response, search the portlet error log file for the string "log errorID = <nnnnn>" where <nnnnn> is the same number as that reported to the end user. Use this information to follow standard Oracle Portal troubleshooting analysis. Failing this, contact support with the behavior of the portal when accessed from mobile devices or simulators and standard desktop browsers.

How can I use the `_debug` URL parameter for my mobile pages?

You can add the `_debug` URL parameter to the end of a page URL to augment the displayed content with information about the timings involved in building the page. For example, adding the `_debug` URL to the end of a page that contains the Recent Objects URL might add the following to the page:

Information for Portlet 6,255

Portlet Timing: 624 msec (wait=0)

Timing Status:

XSLT Timing: null msec

Caching information of portlet:

Portlet Cache status: Web Cache:- MISS,NEW [M], File System Cache:- MISS,NEW

From Cache: Web Cache:- Cache Expires: 86400 secs, Age in Cache: 0 secs, File System Cache:= None

From Portlet: Cache Key: 2002:04:22:329370|1|5, Cache

Performing this operation for mobile browser access of a page is not as simple as for standard desktop browser access. There are two main reasons for this:

- The URL that the mobile device uses to access the portal references an OracleAS Wireless service and not Oracle Portal, therefore you cannot simply append `_debug=1` to the URL in the mobile browser.
- Due to the mechanism for rendering this information (behavior in the PPE, not the database), the extra information cannot be added in-line to a mobile page as this would cause the rendered page to be invalid OracleAS Wireless XML.

Therefore, to make use of the `_debug` parameter for mobile pages, you will need to:

1. Create a new service on the OracleAS Wireless server that directly references a page (`http://host.domain:port/portal/page/MyPageGroup/MyPage?_debug=1`), rather than the portal's home procedure that is registered for the default Oracle Portal service (`http://host.domain:port/pls/portal/PORTAL.home`).
2. Request this new service, not the Oracle Portal service, in the mobile device.
3. View the portlet log for the performance information that will have been recorded from these actions.

The output of these actions will be recorded in the servlet log, and will be of the following form:

```
4/23/02 5:38 AM portal: [perf] Information for Portlet 33,31071.
```

```
Portlet Timing: 234 msec (wait=0)
```

```
Timing Status:
```

```
XSLT Timing: null msec
```

```
Caching information of portlet:
```

```
Portlet Cache status: <I>Web Cache:-</I> MISS,NON-CACHEABLE [N], <I>File System Cache:-</I> MISS,NEW
```

```
From Cache: <I>Web Cache:-</I> -, <I>File System Cache:-</I> None
```

From Portlet: Cache Key: NORMAL, Cache Level: USER

4/23/02 5:38 AM portal: [perf] Information for Page 33%2C31060%2C33_31062
 Elapsed Time: 2470 msec
 Page meta-time 7 msec (wait = 994)
 Page meta Cache Status: <I>Web Cache:-</I> MISS, NON-CACHEABLE [N], Cache Expires:
 null secs, Age in Cache: null secs, <I>File System Cache:-</I> MISS, NEW
 Login meta-time 1227 msec (wait = 1)
 Login meta Cache Status: <I>Web Cache:-</I> MISS, NON-CACHEABLE [N], Cache
 Expires: null secs, Age in Cache: null secs

What information should I have available if I need to contact support?

Here is a checklist of actions to perform, and information to have available, when contacting support regarding a mobile related issue:

- What are the symptoms of the error (for example, error messages, lack of response, blank screen)?
- What is the context of the error?
 - Was the user logged on?
 - * Do all authenticated users suffer the same problem?
 - * Does the public user suffer from the same problem?
 - When did the problem occur? Was it:
 - * During the log in phase? Exactly how far did the user get in logging in? Did the user follow a login link or some other method?
 - * When viewing a page? Describe the page structure. Do any of the portlets allow their titles to be personalized? Can the page be previewed using a standard desktop browser (that is, without OracleAS Wireless in the communication network)?
 - * Viewing an individual portlet?
 - Does the problem occur on all mobile pages, or just one or some?
- Is WebCache enabled for Oracle Portal and OracleAS Wireless access?
- If possible, run the portal service through the OracleAS Wireless debug tool (this will require specific OracleAS Wireless access).
- Is there any record of the problem in any of the following logs:
 - Oracle HTTP Server logs: ORACLE_INSTANCE/diagnostics/logs/OHS/ohs1/access_log
 - PPE Server logs: MW_HOME/user_projects/domains/<DomainName>/servers/WLS_PORTAL/logs/WLS_PORTAL-diagnostic.log

Part IV

Designing the Layout and Appearance of Pages

Part IV contains the following chapters:

- [Chapter 10, "Working with Layouts"](#)
- [Chapter 11, "Working with Colors and Fonts"](#)
- [Chapter 12, "Providing a Standard Look and Feel"](#)
- [Chapter 13, "Designing Your Portal's Navigation"](#)

Working with Layouts

The layout of a page is determined by its region and tab placement. Regions serve both to provide the layout structure of a page and to contain your portal content. Tabs serve to enable a virtual stack of regions.

Figure 10–1 Different Page Layouts Using Regions and Tabs



As simple as the concept of regions is, it is nonetheless possible to exercise a number of powerful controls over how a region behaves. This chapter explores the controls available for managing regions and provides information on how to use those controls to get your desired result. It includes the following subsections:

- [Section 10.1, "Using Regions to Create a Page Layout"](#)
- [Section 10.2, "Configuring Region Display Options"](#)
- [Section 10.3, "Working with Tabs"](#)
- [Section 10.4, "Troubleshooting Regions and Tabs"](#)

Intended Audience

The content of this chapter is intended for users who will work with regions. Most related tasks require at least the page privilege *Manage*. When an additional or different privilege is required, it is noted before each task or group of tasks.

10.1 Using Regions to Create a Page Layout

Use regions to structure the layout of information on a page. Regions can contain either portlets, items, tabs, or links to sub-pages of the current page. When you first

create a page, it consists of at least a single region. You can edit or personalize a page to add more regions.

This section discusses the ways you can use regions to create a page layout. It includes the following subsections:

- [Section 10.1.1, "Adding a Region to a Page"](#)
- [Section 10.1.2, "Deleting a Region from a Page"](#)

If a page is based on a Portal Template, region configuration is determined by the template. You cannot add more regions directly to a page that is based on a template. To add more regions, you must add them to the template (provided you have the required privileges).

An exception to the restriction on adding regions to templates is when the Portal Template includes a tab. If you have a sufficient privilege level to edit or personalize a page that is based on a template, and that template already contains at least one tab, you can edit or personalize the page and add more tabs. When you personalize the page, the region on the tab is always and only a portlet region. When you edit the page, the region is undefined, and you can make it any type of region you require.

10.1.1 Adding a Region to a Page

In most cases, when you first add a region to a page, the region type is *undefined*. (The new region has the potential to contain either portlets, items, sub-page links, or tabs. The region type of the source region (that is, the region where you clicked the **Add Region** icon) does not matter. The attributes and properties of the source region are inherited according to the following rules:

- When you designate the new region to be the same type as the source region, the new region uses the same property settings and attribute list or HTML content layout as the source region.
- When you designate the new region to be a different type than the source region, the new region uses the same property settings as the source region but not the same attributes or HTML content layout. Instead it uses the default attribute list for that region type.

An exception to this occurs when you personalize a page. You can add tabs when you personalize a page, and those tabs have regions, which are always portlet regions. When you create a second and subsequent portlet region on a personal tab, these regions have the same property settings and attribute selections or HTML content layout as the source region.

To add a region to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the page where tabs are to be added.

This opens the page in Edit mode.

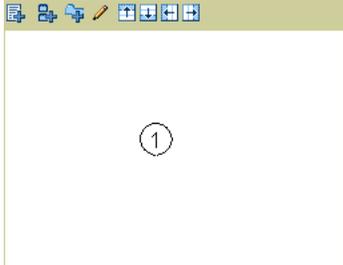
5. Use the **Add Region** icons to add a region to the page ([Figure 10–2](#)).

Figure 10-2 The Add Region Icons



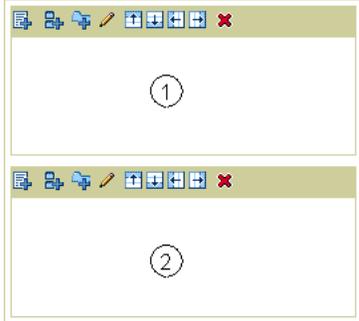
For example, here is a single region on a page (Figure 10-3):

Figure 10-3 A Region



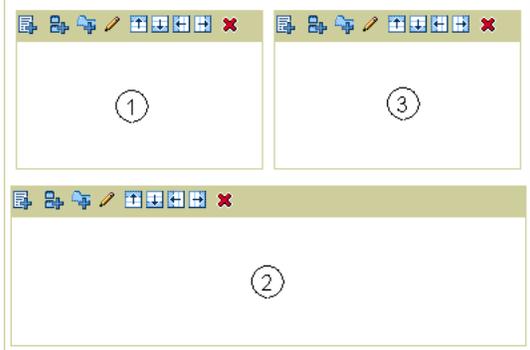
Click the **Add Region Below** icon in region 1 to create a second region (region 2) of the same width directly under region 1 (Figure 10-4):

Figure 10-4 Two Regions



Click the **Add Region Right** icon in region 1 to create third region (region 3) to the right of region 1 (Figure 10-5):

Figure 10-5 Three Regions



Region 3 is the same height as region 1 (the region next to 3), not the height of the entire page.

10.1.2 Deleting a Region from a Page

Deleting a region from a page changes the entire landscape of the page. Once you've deleted a region there is no way to reinstate it, so be sure that is the action you want to take.

If the region you are deleting contains portlets or items, you are prompted to specify where you would like to relocate them. If the region contains tabs or sub-page links, you are not prompted to relocate. With tabs, you must either delete the region and all its content, or cancel the delete and relocate the content before deleting the region. With a sub-page links region, the region and all its sub-page links are deleted. Recovering them is simply a matter of adding another sub-page links region.

Additionally, if the region comes from a template, you can delete it from the template only under one of the following circumstances:

- No users have added content to the region on pages that are based on the template.
- You have sufficient privileges to delete all the region content on all the pages based on the template.

This is to prevent users without the appropriate privileges from managing content.

Note: Every page must contain at least one region. If there is only one region on a page, you cannot delete it.

To delete a region from a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.

This opens the page in Edit mode.

5. Click the **Delete Region** icon in the region to be deleted (Figure 10–6).

Figure 10–6 The Delete Region Icon



6. The next step depends on the specifics of region you are deleting:
 - If the region contains portlets or items, you are prompted to specify where you would like to relocate them.

Use the radio buttons to identify the region where content should be moved, then click **Move Content**. Alternatively, click **Delete Content** to remove the region and its content.

Note: You can move portlets only to another portlet region; you can move items only to another item region.

- If the region contains tabs, you are reminded that deleting the region will delete all the tabs within that region and remove all the content on those tabs.
7. Click **Delete Region** to continue, or **Cancel** to cancel the delete and move the portlets or items before resuming.

10.2 Configuring Region Display Options

Regions come with powerful controls you can use to define how they will treat the content that is placed inside them. This section describes how to use those controls. It includes the following subsections:

- [Section 10.2.1, "Changing a Region Name"](#)
- [Section 10.2.2, "Changing a Region Type"](#)
- [Section 10.2.3, "Changing the Height and Width of a Region"](#)
- [Section 10.2.4, "Displaying or Hiding Banners"](#)
- [Section 10.2.5, "Changing the Number of Columns and Rows in a Region"](#)
- [Section 10.2.6, "Changing the Alignment of Items"](#)
- [Section 10.2.7, "Setting Sub-Page Links Region Properties"](#)
- [Section 10.2.8, "Setting a Uniform Height and Width for Item Icons"](#)
- [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#)
- [Section 10.2.10, "Grouping Items in a Region"](#)
- [Section 10.2.11, "Defining a Sort Order for Items"](#)
- [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#)
- [Section 10.2.13, "Showing or Hiding Portlet Header Links"](#)
- [Section 10.2.14, "Changing Portlet and Item Spacing"](#)

Region locking is another region display setting available through Oracle Portal. Because region locking is closely associated with your portal's security, it is covered in [Chapter 17, "Protecting Your Content"](#).

10.2.1 Changing a Region Name

Providing a name for a region is useful for at least two reasons:

- To identify the content of a region for your users

You can display the region name in a banner at the top of the region to let users know what kind of content to expect in the region.
- To provide descriptive names for regions during region mapping

Region mapping occurs when you map the regions of an existing page to the regions in a Portal Template you are applying to that page. When you name a region, the name appears over the region in lieu of an automatically assigned number. This makes it easier to identify regions as you map content from the page to the template.

- To provide descriptive names for regions during copies and moves

When you copy or move items from one page to another with multiple item regions, you are asked to select the region in which to publish the copied or moved items. When the regions are labeled meaningfully, it is obvious to the user which region to select.

To change a region name, the region type must be specified. That is, it must be an item, portlet, or sub-page links region.

To change the region name:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the region is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** heading in the Layout & Appearance section, click the link to the page where the region is located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant region (Figure 10–7).

Figure 10–7 The Edit Region Icon



6. On the resulting page, go to the **Region Display Options** section, and enter a name in the **Display Name** field.
Enter up to 4000 of characters of any kind.
7. If you want to display the region name in a banner at the top of the region, select **Display Region Banner**.
8. Click **OK** to save your changes and return to the page.

10.2.2 Changing a Region Type

Region types accept only their related type of content. For example: you can add only portlets to a portlet region and items to an item region. You cannot add anything to a sub-page links region; these regions automatically populate with links to sub-pages of the current page. You cannot add anything to a tab region except another tab.

If you have the page privilege *Manage* on the page, you can add a portlet or an item to an undefined region. Once you add content to an undefined region, the region becomes defined: it becomes a portlet region if you add a portlet, an item region if you add an item.

Users who do not have the page privilege *Manage* on the page cannot add content to an undefined region. For such users, undefined regions display without edit controls. To enable such users to add content, a user with the page privilege *Manage* must change the region type to *item* or *portlet* by adding an item or a portlet to the region or by explicitly changing the region type.

You can change the region type of portlet and item regions only if the region is empty. You can change the region type of sub-page link regions at any time, whether or not

the region contains any links to sub-pages. You cannot change the region type of a tab region. You cannot change a region type in a Portal Template if any page that is based on the template already includes content in that region.

To change the region type:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page with the region to be changed.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout and Appearance section, click the link to the page with the region to be changed.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region to be changed (Figure 10-8).

Figure 10-8 The Edit Region Icon



6. On the resulting page, go to the **Region Type** section, and from the **Type** radio group, select either:
 - Undefined
 - Portlets
 - Items
 - Sub-Page Links

Note: If you do not see the radio buttons, your region already contains items, portlets, or tabs; so you cannot change the type. Delete the tabs, or delete or move the items or portlets; and try again.

You can change the type of a sub-page links region at any time, provided you have the privilege to do so and the region is not part of a template applied to the page you are working with.

Tab is not an option under this section because tab regions are created automatically, when users create tabs. You cannot change a tab region's type.

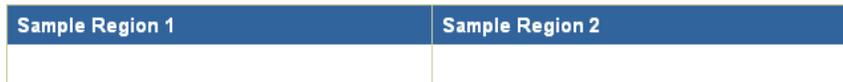
7. Click **OK** to save your changes and return to the page.

10.2.3 Changing the Height and Width of a Region

By default, regions share available space equally. For example, here is a single region on a page (Figure 10-9):

Figure 10–9 One Region Using 100 Percent of Available Space

If you add another region to the right of this region, each region will take up 50% of the width of the page (Figure 10–10):

Figure 10–10 Two Regions, Each Using 50 Percent of Available Space

If you want regions to use available space in unequal proportion, you can explicitly set the width of each region. You can set the width of a region to a specific number of pixels or to a percentage of the overall width of the page. Do not intermix region widths of pixel and percent.

You can also set the height of a region. Region height is always set in pixels. Setting the height of a region establishes a minimal height. If content exceeds the set height of a region, the region expands to accommodate it.

Region widths and heights never cause content to truncate. No matter what values you set, regions always expand to accommodate content. If exacting region proportions matter to your portal, you must size content to fit your regions.

Note: Region content can be truncated as a result of region column and row settings. For more information, see [Section 10.2.5, "Changing the Number of Columns and Rows in a Region"](#).

To change the height and width of a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the Page Group that owns the page with regions to be resized.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page with regions to be resized.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region to be resized (Figure 10–11).

Figure 10–11 The Edit Region Icon

6. On the resulting page, go to the **Region Display Options** section, and enter or edit the values for **Width** and **Height**:

- In the **Width** field, enter the width of the region in pixels (a number, such as 20) or as a percentage of the overall width of the page (a number and a percent sign, such as 20%).

Note: You must include a percent sign (%) if you want the number you enter to be interpreted as a percentage of page width rather than a number of pixels.

- In the **Height** field, enter the height of the region in pixels.

An empty region with a declared height is rendered with that height in both Edit and View modes. When a region height is not specified, an empty region does not take up any space in View mode. When you use an empty region as a spacer between other regions on the page, be sure to specify a region height.

7. Click **OK** to save your changes and return the page.

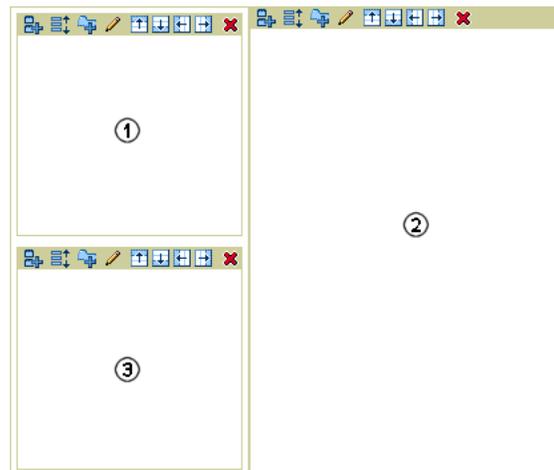
If you choose to have the width of some regions expressed in pixels and other regions on the same page expressed in percentages, the page may look slightly different in different browsers.

If you enter a height or width of 1 in an attempt to make the region as small as possible, the region will nonetheless expand to display the full content of the region.

If you add another region to the right or left of an existing region, the region widths are automatically reset to be equal. For example, if you have a page with two regions side-by-side, one with a width of 40% and the other 60%, if you add a third region on the same line, all the regions will be reset to a width of 33%.

You might have a region configuration that looks something like [Figure 10–12](#):

Figure 10–12 *Region 1 Is Divided Horizontally, Then Vertically*



In this case, even if you set regions 1 and 3 to have different widths, the actual width of the column will be as wide as the widest region in that column. So if region 1 has a specified width of 40% and region 3 has a specified width of 20%, when viewing the page, the column containing regions 1 and 3 will be 40% of the width of the page.

Pixel widths take precedence over percentage widths. Therefore, if region 1 has a width of 40% and region 3 has a width of 200 pixels, when viewing the page, the column containing regions 1 and 3 will be 200 pixels wide.

10.2.4 Displaying or Hiding Banners

A region banner is a rectangle of color that spans the width of a region and contains a heading. Region banners are useful for calling out a specific area on a page and identifying its purpose. In Oracle Portal, there are two types of banners available for use with regions:

- **Region** banners display at the top of a region and, typically, include a meaningful region name (Figure 10–13). Both item and portlet regions use this type of banner.

Figure 10–13 Region with Banner



- **Group By** banners display over each group of items in a region and categorize the types of items that fall under it (Figure 10–14). Only item regions use this type of banner.

Figure 10–14 Group By Banners Simple Text and Simple URL



Note: For more information about grouping items in a region, see [Section 10.2.10, "Grouping Items in a Region"](#)

In Oracle Portal, you can specify whether a region should display one or the other or both of these types of banners.

To display or hide banners:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page with region banners to show or hide.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under **Pages** in the Layout & Appearance section, click the link to the page with region banners to show or hide.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region with banners to show or hide (Figure 10–15).

Figure 10–15 The Edit Region Icon

6. On the resulting page, go to the **Region Display Options** section:
 - To display a region banner, provide a region **Display Name**, and select **Display Region Banner**. The region banner displays only when you give the region a name.
 - To hide a region banner, clear the **Display Region Banner** check box. The region display name displays in Edit mode, but not in View mode.
7. Go to the **Item Display Options** section (item regions only):
 - To display a Group By banner, choose a grouping criterion from the **Group By** drop-down list. Choose from:
 - **None** to forgo the grouping of items
 - **Category** to sort items by their assigned categories
 - **Author** to sort items by their authors
 - **Date** to sort items by their upload date
 - **Base Item Type** to sort items by their base item type

Then select the **Display Group By Banner** check box. Group By banners display only when you check this check box and select a grouping option other than **None**.
 - To hide a Group By banner, clear the **Display Group By Banner** check box.
8. Click **OK** to save your changes and return to the page.

10.2.5 Changing the Number of Columns and Rows in a Region

If you have many items or portlets in a region, you may want to arrange them into multiple columns to conserve space. You can specify how many columns and rows you want to include in a region.

When you specify a number of columns in a region but do not specify a number of rows, the number of rows dynamically expands to accommodate all the items or portlets in a region. When you specify a number of columns and rows in a region, and the number of items exceeds the number of items this allows, the overflow items do not display until you change the number of columns or rows to accommodate them.

For example, if you have eight items, and you specify two columns and three rows, only six items display. The other two do not. The items that do not display are retained, rather than lost or deleted. If you change the number of rows to four or the number of columns to three, all eight items display.

The following examples show the same region with different numbers of columns and rows:

Figure 10–16 Region 1 with Eight Items in Four Columns (Rows Not Specified)

Region 1

Item 1	Item 2	Item 3	Item 4
Item 5	Item 6	Item 7	Item 8

Figure 10–17 Region 1 with Two Columns and Three Rows (Two Items Truncated)

Region 1

Item 1	Item 2
Item 3	Item 4
Item 5	Item 6

To change the number of columns and rows in a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the relevant page.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant region ([Figure 10–18](#)).

Figure 10–18 The Edit Region Icon

6. On the resulting page, go to the **Region Display Options** section, and enter the number of columns you want for the region in the **Number of Columns** field.
Leaving this field blank results in one region column.
7. In the **Number of Rows** field, enter the number of rows you want for the region.
Leaving this field blank results in a variable number of rows. That is, the region will provide the number of rows required to accommodate the region content.
8. Click **OK** to save your changes and return to the page.

10.2.6 Changing the Alignment of Items

You can align items in a region specifically or conditionally, according to the requirements of your portal's language setting. Specific alignments include *left*, *center*, and *right*. Conditional alignments include *start* and *end*. Start and End work in conjunction with portals using bidirectional languages. For languages reading right to left, Start aligns items right and End aligns items left. For languages reading left to right, Start aligns items left and End aligns items right.

[Figure 10–19](#) shows the same region with different item alignment settings:

Figure 10–19 The Same Region Shown With Different Item Alignment Settings

Sample Region 1	Sample Region 1
Sample Item 1	Sample Item 1
Sample Item 2	Sample Item 2

To change the alignment of items in a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under **Pages** in the Layout & Appearance section, click the link to the relevant page.
This opens the page in Edit mode.
5. Click the **Edit Region** icon in the relevant region (Figure 10–20).

Figure 10–20 The Edit Region Icon

6. On the resulting page, go to the **Item Display Options** section, and choose an item alignment from the **Item Alignment** list.
Choose from:
 - **Left** to align items against the left border of the region
 - **Center** to align items within the center of the region
 - **Right** to align items against the right border of the region
 - **Start** to align items according to reading direction of the portal's current language: in languages that read left to right, Start aligns items left; in languages that read right to left, Start aligns items right
 - **End** to align items according to the reading direction of the portal's current language: in languages that read left to right, End aligns items right; in languages that read right to left, End aligns items left
7. Click **OK** to save your changes and return to the page.

10.2.7 Setting Sub-Page Links Region Properties

Sub-Page Links regions share many of the same region properties you find with item and portlet regions. Additionally, they have a few that are unique to type. Use these to specify the number of levels of sub-page links to display, the sub-page link attributes to display along with each link, and the icon users should click to navigate up the page hierarchy.

This section describes how to set the properties that are specific to Sub-Page Links regions. It includes the following sub-sections:

- [Section 10.2.7.1, "Specifying Whether One or Two Sub-Page Link Levels Display"](#)

- [Section 10.2.7.2, "Specifying the Attributes to Display with Sub-Page Links"](#)
- [Section 10.2.7.3, "Selecting a Navigation Image"](#)

These options are set at the region level. You will find additional sub-page link display options at the page level. For more information, see [Section 7.9, "Defining the Display of Sub-Page Links"](#) and [Section 13.6.8, "Displaying Links to Sub-Pages"](#).

10.2.7.1 Specifying Whether One or Two Sub-Page Link Levels Display

One of the many ways you can exercise control over the flow of information in your portal is to configure sub-page links regions to expose a greater or lesser number of levels in your page hierarchy. Use sub-page links display options to specify that either one or two levels of sub-page links should display in a Sub-Page Links region.

To specify the number of sub-page links levels to display:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page with the Sub-Page Links region.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page with the Sub-Page Links region.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the Sub-Page Links region ([Figure 10–21](#)).

Figure 10–21 The Edit Region Icon



6. On the resulting page, go to the **Page Level Display** section, and select either:
 - **Display One Level Of Sub-Pages** to link to one level of sub-pages hierarchically lower than the current page
 - **Display Two Levels Of Sub-Pages** to link to two levels of sub-pages hierarchically lower than the current page

Optionally, when you select to display two levels, specify a character to separate second-level links from each other in the **Separator Between Second-Level Sub-Pages** field. For example, when you specify an asterisk with a leading character space, second-level sub-pages will display as illustrated in [Figure 10–22](#).

Figure 10–22 Two Sub-Page Levels With a Space/Asterisk Separator

 [first level subpage 1](#)
[second level subpage 1](#) * [second level subpage 2](#) * [second level subpage 3](#)

 [first level subpage 2](#)
[second level subpage 1](#) * [second level subpage 2](#) * [second level subpage 3](#)

7. Click **Apply** to save your changes and remain on the Edit Region page, or click **OK** to save your changes and return to the page.

10.2.7.2 Specifying the Attributes to Display with Sub-Page Links

In addition to displaying sub-page links, sub-page links regions can display attribute values that are relevant to the sub-page links. These attributes include a sub-page icon, a description of the sub-page, and an image/rollover image for the sub-page.

To display sub-page links attributes:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page with the Sub-Page Links region.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page with the Sub-Page Links region.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the Sub-Page Links region ([Figure 10-23](#)).

Figure 10-23 The Edit Region Icon



6. On the resulting page, go to the **Sub-Pages** section, and select any or all of the following attributes:
 - **Display Sub-Page Icon** to display a sub-page icon next to each, first-level sub-page link ([Figure 10-24](#))

Figure 10-24 The Sub-Page Icon



- **Display Sub-Page Description** to display the content of the sub-page's Description attribute
- **Display Sub-Page Image and Rollover Image** to display an image/rollover image in lieu of the page name

The image and (optionally) rollover image were specified for the sub-page when it was created (or edited). For more information about representative page and rollover images, see [Section 7.7, "Specifying a Representative Image for a Page"](#).

If you select this option, consider not selecting the **Display Sub-Page Icon** attribute

7. Click **Apply** to save your changes and remain on the Edit Region page, or **OK** to save your changes and return to the page.

10.2.7.3 Selecting a Navigation Image

With a Sub-Page Links region, you have the option to display or suppress an image users can click to navigate up the page hierarchy. If you choose to display such an image, you can select between displaying the default image ([Figure 10-25](#)) and providing your own.

Figure 10–25 The Default Navigation Image

Use the options discussed in this section to display or suppress the image, and to select an image other than the default.

To set values for the navigation image:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page with the Sub-Page Links region.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page with the Sub-Page Links region.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the Sub-Page Links region ([Figure 10–26](#)).

Figure 10–26 The Edit Region Icon

6. On the **Main** tab of the Edit Region page, go to the **Image** section, and select one of the following image options:
 - **No Image** to forgo display of a navigation image
 - **Default Image** to display the default navigation image (see [Figure 10–25](#))
 - **Image** to display a navigation image that you specify

In the first field, click the **Browse** button to locate and select a file on your file system.

OR

In the second field, either enter the URL and file name of an image on the Web, or enter the internal name of an image already uploaded to Oracle Portal, for example `1655.gif`. To get the internal name of the image, right-click the image in your portal, and select **Properties** from the resulting menu.

If you are using item versioning and you always want to show the current version of an image, use the image's durable URL instead of the internal file name. The durable URL always picks up the latest version of the image. For more information, see [Section 14.12.4, "Images and Item Versioning"](#).

7. Click **Apply** to save your changes and remain on the Edit Region page, or click **OK** to save your changes and return to the page.

10.2.8 Setting a Uniform Height and Width for Item Icons

One of the attributes commonly associated with items is the Image attribute. This image is not the item itself, but an image associated with the item, for example, it could be an icon you want to associate with items from a particular source, covering a particular topic, or relevant to a particular event.

You can control the display size of that image through region display options. For example, you can upload an image to associate with an item and reduce its size to make it serve as an item icon (Figure 10–27). You can upload different images for different items in a region, and then set a uniform height and width for all such images through one action.

Figure 10–27 *The Same Image Used First as an Item Then as an Item Icon*



Note: For information on setting item attribute values, such as an item’s Image attribute, see [Section 14.4, "Editing Items"](#).

You may want to experiment with the images you plan to use. Some images may look squashed or stretched if their original is larger or smaller than the height and width you specify. Play around with the values for height and width. A squashed or stretched image may snap into proportion with the right values.

Icon height and width options are available only with item regions.

To set a uniform height and width for item icons:

1. Log into Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the item is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the item is located.
This opens the page in Edit mode.
5. Click the **Edit Region** icon in the region where the item is located (Figure 10–28).

Figure 10–28 *The Edit Region Icon*



6. On the resulting page, go to the **Item Display Options** section, and enter a height (in pixels) for item icons in the **Item Icon Height** field.
7. In the **Item Icon Width** field, enter a width (in pixels) for item icons.
8. Click **Apply** to save the changes and remain on the Edit Regions page, or click **OK** to save the changes and return to the page.

10.2.9 Changing the Attributes Displayed in a Region

Typically, when you add content to a region, you also enter information about that content into attribute fields. Through region properties, you can either specify which attributes you would like to display along with the content or select an HTML content layout template that defines the layout, look, feel, and information to display in the

region. For information on HTML content layouts, see [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#). This section discusses how to specify the attributes you would like to display.

For example, by default, item regions display the Link - Image and Display Name, Associated Functions, Description, and Item Content attributes for each item in the region. In some regions you might want to provide more information. For example, you might want to include the Document Size, Expire Date, or some custom attribute specific to your own content. In some regions, you might want to provide less information. For example, you might choose not to include item descriptions.

The Portlet Content and Item Content attributes are always selected by default. These attributes represent the actual content of the portlet or item. If they are removed from the Displayed Attributes list, the portlet or item does not display in the region.

To change the attributes displayed in an item or portlet region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page to be edited.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region to be edited ([Figure 10–28](#)).

Figure 10–29 The Edit Region Icon



6. Click the **Attributes** tab to bring it forward.
7. Select the **Select Attributes** radio button.
8. To add an attribute to the region, select the attribute in the **Available Attributes** list and click the **Move** icon that points to the **Displayed Attributes** list.

Use the buttons to the right of the Displayed Attributes list to arrange the display order of attributes.

For example, if you want the Description attribute to be displayed first, select Description in the Displayed Attributes list, and click the **Move Top** icon to move it to the top of the list.

Note: For a list and descriptions of all seeded attributes, see [Appendix A, "Oracle Portal Seeded Objects"](#), [Section A.2, "Base Attributes"](#).

9. Use **<Blank Line>**, **<Space>**, **<Hard Blank Line>**, and **<Hard Space>** attributes to control the layout of the region attributes.

Add as many of these attributes as you like. They display according to the following rules:

- **Blank Line** inserts a blank line between attributes as specified, unless the subsequent attribute has no value. In this case, the Blank Line attribute is ignored to avoid unnecessary white space.
 - **Hard Blank Line** inserts a blank line between attributes as specified regardless of whether any subsequent attributes have values.
 - **Space** inserts a blank space between attributes as specified, unless the subsequent attribute has no value. In this case, the Space attribute is ignored to avoid unnecessary white space.
 - **Hard Space** inserts a blank space between attributes as specified regardless of whether any subsequent attributes have values.
10. To remove an attribute from the region, select the attribute in the **Displayed Attributes** list and click the **Move** icon that points to the **Available Attributes** list.
 11. Click **Apply** to save your changes.
 12. Click **Close** to return to the page.

When an attribute does not have a value, it does not display in the region, even though it was moved to the Displayed Attributes list. For example, if the you move the Description attribute to the Displayed Attributes list, but no description was entered for the item when it was added or edited, then the Description attribute will not display next to the item.

Note, however, that no matter what attributes are displayed for the region, navigation item types, such as Portal Smart Links, List of Objects, and the like, do not display any attributes other than Item Content and Display Name (or some version of Display Name, such as Search Label). If you remove Item Content or Display Name from the list of Displayed Attributes, navigation item types will nonetheless continue to display the Item Content or the Display Name.

You can display MIME type images next to items on a page to provide users with a visual cue about the item type. For example, a Microsoft Word MIME type image is a small version of a Word document icon. It would display next to any Microsoft Word documents uploaded to the page. To display the MIME type image before any other attribute (recommended), select **Item Type Icon** in the **Displayed Attributes** list, and click the **Move Top** icon.

When a page link item is selected to display in a region with the *Link - Image and Display Name* attribute selected, and the user has provided an image but no display name for the page link item, after an upgrade the Link - Image and Display Name attribute is rendered as the title of the target page along with the original uploaded image. If this is not the desired effect, select the attribute *Link - Image OR Display Name* for the affected region. This will result in just the image being displayed.

10.2.10 Grouping Items in a Region

When your portal content is time-sensitive, diverse, closely identified with subject-matter experts, or easily divided into specific functional areas, such as *presentations*, *archives*, and *articles*, grouping it according to date, category, author, or item type could prove useful. The care given to ensuring that users can find a specific page can extend to ensuring that they can find specific content. One way to do this is to group content. In Oracle Portal, you can group region content by:

- Category
- Author
- Date

- Base Item Type

Content grouping is available only with item regions.

Figure 10–30 shows the same region, first grouped by item type, then grouped by category.

Figure 10–30 Region Shown Grouped by Item Type Then by Category

Simple Text	Category 1
Item 1	Item 2
Item 2	Category 2
Simple URL	Item 1
Item 3	Item 3

To group the items in a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the region is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the region is located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant region (Figure 10–31).

Figure 10–31 The Edit Region Icon



6. On the resulting page, go to the **Item Display Options** section, and choose one of the following grouping criteria from the **Group By** drop-down list:
 - **None** to forgo the grouping of items
 - **Category** to group items by their category
 - **Author** to group items by their author

Author groups are ordered alphabetically by the user name of the user who uploaded the item (the author).
 - **Date** to group items by their creation date

Date groups are ordered from oldest to most recent.
 - **Base Item Type** to group items by their base item type

For example, *Base File*, *Base Text*, *Base Image*, and so on.
7. Select **Display Group By Banner** to display a banner with each group (Figure 10–30).

Banner text is generated from the value associated with the grouping criteria. For example, if you group by author, the banner text is the author’s name. If you

group by item type, the banners text is the name of the item type, such as *Simple File*, *Zip File*, and so on.

8. Click **OK** to save your changes and return to the page.

The grouping criterion displays in the Group By banner. For most grouping criteria, the grouping criterion displays as a link, which, when clicked, invokes a search for all items of a like category, author, create date, or base item type. Some criteria are not suitable for searching, such as a login/logout link. When the grouping criterion is not suitable for searching, it is not rendered as a link in the Group By banner.

In addition to *grouping*, Oracle Portal offers *sorting*. Where grouping determines how items are clustered together, sorting determines the display order for each cluster. If items are not grouped, then sorting determines the display order for all items in the region. For more information, see the next section.

10.2.11 Defining a Sort Order for Items

You can specify the order in which items are displayed in a region. When items are grouped using the Group By option, the sort order you specify determines the order of the items within each group. When items are not grouped using the Group By option, the sort order you specify determines the order of items within the region. Item ordering options are available only for item regions.

To specify the display order of items in a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the items to be sorted are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the items to be sorted are located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region where the items to be sorted are located (Figure 10–32).

Figure 10–32 The Edit Region Icon



6. On the resulting page, go to the **Item Display Options** section, and choose one of the following options from the **Sort By** list:

- **Default** to forgo the sorting of items

If you choose this option, items are not sorted automatically. They are arranged according to how they are explicitly placed in the region. Users can arrange the items the way they like using the Arrange option available in the region banner in page Edit mode. The Arrange option does not display when another sorting option is selected.

- **Title** to order items alphabetically by their display name
- **Size** to order items by their size

This option works for File items, Image items, and other items based on files. No other item types have a size associated with them.

If you choose to order the items in a region by display name (Title) or size, the **Arrange Items** icon does not display in the region toolbar (Page Edit mode), and you cannot manually order items in the region

7. In the **Sort Order** list, choose:
 - **Ascending** to order items from A to Z (**Title**), or smallest to largest (**Size**)
 - **Descending** to order items from Z to A (**Title**), or largest to smallest (**Size**)
8. Click **OK** to save your changes and return to the page.

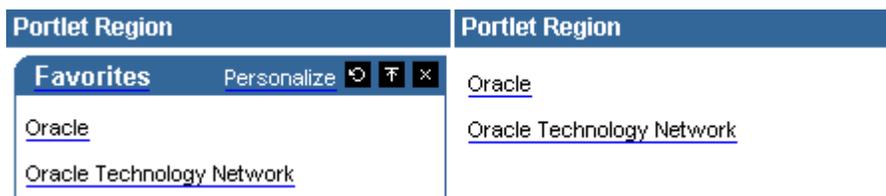
10.2.12 Displaying or Hiding Portlet Headers and Borders

There are a number of reasons you might choose to display portlet headers and borders: in a region with a large portlet population, you may be seeking a way to distinguish one portlet from another; you may care to highlight the specific purpose of a portlet by assigning and exposing a meaningful display name; you may want to expose the controls, such as the Personalize link, that are provided with some portlets. Whatever your reason, it is a simple matter to display or hide portlet headers and borders.

Portlet headers consist of a color banner at the top of a portlet, populated with the portlet's display name and any links that are available for display (see [Section 10.2.13](#)). Portlet borders outline a portlet with a thin line that matches the header color.

[Figure 10–33](#) shows the same region, first with portlet headers and borders displayed, then hidden.

Figure 10–33 Same Region with Portlet Headers and Borders Displayed, then Hidden



Because portlet headers contain the Personalize link, if you hide headers, users will not be able to access this link nor personalize any portlets in the region. Privileged users can still edit the portlet defaults when they edit the page.

When you display or hide portlet headers or borders, all the portlets within the region are affected. You cannot control portlet headers or borders for individual portlets within the region. However, you can display portlet headers or borders in one region and hide them in another.

Portlet header and border options are available only for portlet regions.

To display or hide portlet headers or borders:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the portlet region is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the portlet region is located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant portlet region (Figure 10-34).

Figure 10-34 The Edit Region Icon



6. On the resulting page, go to the **Portlet Display Options** section, and specify your portlet header and border preferences.

Choose from:

- Select **Show Portlet Headers** to display a color banner that contains the portlet display name and all available and enabled links and icons (see Section 10.2.13). Leave this option unselected to hide portlet headers and their associated links and icons.
 - Select **Show Portlet Borders** to display a thin line the color of the portlet header around the portlets in a region. Leave this option unselected to hide portlet borders.
7. Click **OK** to save your changes and return to the page.

Note: Regardless of whether a page portlet or navigation page uses its source page's style, once the page portlet or navigation page is placed on a page, its headers and borders always use the style of the target page. This is because the controls for a portlet's headers and borders operate at the region level, and the region is a component of the target page.

If you do not care to use the target page's header and border colors on the portlets belonging to a page portlet or a navigation page, you can turn off the display of headers and borders at the region level on the target page. If the page portlet or navigation page also contains its own portlets, you must also turn off the display of headers and borders for portlet regions on the source page.

To ensure that a page portlet or navigation page uses its own background color, rather than the one specified for its host page:

1. Do not select the option **Use Style Of Page On Which Portlet Is Placed** for the navigation page or the page that you are publishing as a portlet.
 2. In the style used by the target page, clear any value from the Portlet Body Color style element and click **Apply**.
-

10.2.13 Showing or Hiding Portlet Header Links

Many of the portlets provided through Oracle Portal, as well as through third parties, include individual controls for such actions as personalizing the portlet, performing a specific refresh on the portlet, invoking portlet help, and so on. When you display portlet headers (see Section 10.2.12), you also have the option of showing or hiding portlet controls in each portlet header in a region.

The controls that are available depend on the types of controls that were included in the portlet when it was constructed. Although you may select all control options when you edit region properties, only those controls intrinsic to the portlet display. For example, you may choose to expose a Help link in a portlet header. If the developer who created the portlet provided portlet help, the Help link displays. If the developer did not provide help, the link does not display, even though it is selected for display in region properties.

When you edit region properties to show or hide portlet header links, all the portlets within the region are affected. The display of portlet header links are controlled at the region level. If you want some portlets to display links and others to hide them, you can place the display portlets in one region, where links are exposed, and the hide portlets in another, where links are hidden.

Link options include:

- **Personalize**—Enables users to create a personal view of a portlet
- **Help**—Connects to portlet help text
- **About**—Connects to a portlet description
- **Details**—Links the portlet title to a more detailed view of the portlet
- **Refresh**—Refreshes the display of a portlet without refreshing the entire page
- **Remove**—Removes the portlet from the user's personal view of the page

Note: When users remove a portlet from their own view of a page, it is the same as when they hide the portlet from view. (See [Section 15.4, "Hiding and Showing Portlets"](#) for more information.) In either case, the user can restore the portlet by personalizing the page and selecting the Show action on the portlet. With this in mind, any page that contains portlets with a Remove header link should also include a **Personalize** link to allow users to restore removed portlets.

- **Collapse/Restore**—Minimizes and maximizes portlet display in the user's personal view of the page

Note: The Personalize, Collapse/Restore, and Remove links/icons do not display when the page is in Edit mode. They display when the user returns the page to View mode.

When you suppress the display of the Collapse/Restore icon on a portlet header, all instances of collapsed portlets on the affected page are restored automatically to prevent them from being stuck in a permanently collapsed state. Should the display of the Collapse/Restore icon be reinstated, all portlet instances are reset to the state they were in before icon display was suppressed.



For information on how to specify Help and About text for your portlets, see the *Portal Developer Kit* on the Oracle Portal section of the Oracle Technology Network, http://www.oracle.com/technology/products/ias/portal/portlet_development_10g1014.html.

If you do not display portlet headers (see [Section 10.2.12](#)), the links described in this section will not display, even if you have selected a display check box. Portlet header link options are available only for portlet regions.

To show or hide portlet header links:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the portlets are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the portlets are located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region where the portlets are located (Figure 10–35).

Figure 10–35 The Edit Region Icon



6. On the resulting page, go to the **Portlet Display Options** section, and select from:
 - Show Portlet Headers, to show portlet headers, then select the portlet header links you will display.
 - Clear the **Show Portlet Headers** check box to hide portlet headers. When portlet headers are hidden, no links display, whether or not they are selected.
7. Click **OK** to save your changes and return to the page.

10.2.14 Changing Portlet and Item Spacing

In designing the layout of your portal pages, you may want to exercise tight control over the spacing of objects within regions. Oracle Portal provides this control through region display options. Using these options, you can change the amount of blank space rendered around and between the portlets and items in a region.

Figure 10–36 shows the same region with different portlet spacing. In the first example the space around portlets is set to 4 pixels and the space between portlets is set to 6. In the second example, the space around portlets has been changed to 10 pixels. In the final example the space between portlets has been changed to 15 pixels.

Figure 10–36 The Same Region with Different Spacing around and between Portlets



To change item and portlet spacing:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the region is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the region is located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant region (Figure 10–37).

Figure 10–37 The Edit Region Icon



6. On the resulting page, go to the **Region Display Options** section, and enter a value (in pixels) in the **Space Between [Portlets or Items]** field.
7. Enter a value (in pixels) in the **Space Around [Portlets or Items]** field.
8. Click **OK** to save your changes and return to the page.

10.3 Working with Tabs

Tabs enable you to increase the amount of information on a page without increasing the amount of congestion. For example, suppose you want to create a home page for your entire user base. The information you want to provide encompasses several different areas, each of which is relevant to certain users: technical, human resources, marketing, and finance. To present all of the information on one page, you can place each area of focus on its own tab (Figure 10–38):

Figure 10–38 Four Tabs



A tab can be in one of two states: *active* or *inactive*. An active tab is a tab that is currently selected within a tab set. In Figure 10–38, the Technical tab is the active tab. The rest of the tabs are inactive. You can specify different colors, fonts, and images for active and inactive tabs.

How you use tabs depends on how you plan to implement navigation within your portal. Tabs offer a simple way to deploy a tab-set navigation model that includes many of the same capabilities available with a page.

The Oracle Portal tab feature is just one way of realizing a tab set in your portal design. Using standard HTML techniques in combination with portal pages, you can implement many others. For example, use JavaScript to create an effect that visualizes portal pages and sub-pages as a series of tabs in a tab set.

For more information about navigation, see [Chapter 13, "Designing Your Portal's Navigation"](#).

For information about securing a tab, see [Chapter 17, "Protecting Your Content"](#).

This section explores some of the ways you can work with tabs using the inherent capabilities of Oracle Portal. It includes the following subsections:

- [Section 10.3.1, "Adding a Tab to a Page"](#)
- [Section 10.3.2, "Naming a Tab"](#)
- [Section 10.3.3, "Rearranging the Order of Tabs in a Region"](#)

- [Section 10.3.4, "Hiding/Showing Tabs"](#)
- [Section 10.3.5, "Changing the Alignment of Tabs"](#)
- [Section 10.3.6, "Changing a Tab Image"](#)
- [Section 10.3.7, "Adding a Rollover Effect to Tabs"](#)
- [Section 10.3.8, "Deleting Tabs"](#)

10.3.1 Adding a Tab to a Page

To add a tab to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to add a tab.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page on which to add a tab.

This opens the page in Edit mode.

5. In the region on which to add a tab, click the **Add Tab** icon.

The region now looks like [Figure 10–39](#).

To add more tabs at the same level, click the Add Tab icon that displays to the side of the tab you just added ([Figure 10–39](#)). If you click the Add Tab icon under the tab, you'll start another row of tabs under the first row (that is, you will create sub-tabs).

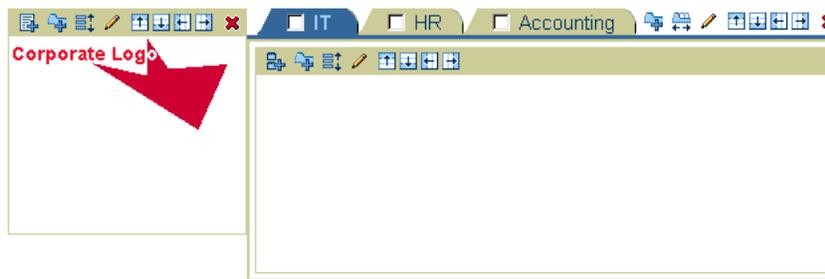
Figure 10–39 *Creating a new tab at the same level*



The first tab you create on a region, contains the region. For example, when you click the Add Tab icon in an item region's toolbar, the tab is created and it contains the item region from which it was created. The second and subsequent tabs that you create in the same tab set contain their own blank content regions.

When you add a tab to a center-aligned region, the tab is initially centered—even though *Center* is not a tab alignment option. To change the alignment of the tab, edit the tab region and click OK. You may note that when you edit the tab region, left-alignment is already selected for the region. Nonetheless, the tab does not initially display left-aligned because it has taken its defaults from the region from which it was created. For information on changing tab alignment, see [Section 10.3.5, "Changing the Alignment of Tabs"](#).

If there is a portlet or item you want to display no matter what tab is active—say, a link to your corporate Web page—divide your page into two regions: one containing the portlet or item, the other containing the tabs ([Figure 10–40](#)).

Figure 10–40 A Region for a Logo and a Region for a Tab Set

10.3.2 Naming a Tab

When you first add a tab to a page, the text displayed on the tab defaults to **New Tab**. You can change this text to label the tab in keeping with its intended purpose.

Note: To change tab text, you must have at least the tab privilege *Manage*. However, if you can personalize a page, you can personalize the text of the tabs you add. But you cannot personalize the text of tabs added by another user.

To change tab text:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to rename a tab.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page on which to rename a tab.

This opens the page in Edit mode.

5. Click the **Edit Tab** icon on the relevant tab (Figure 10–41).

Figure 10–41 The Edit Tab Icon

6. In the **Name** field, enter a name for the tab.

Enter up to 60 characters. Use any characters, except the following:

, & # % \ / : * ? < > | "

The Name is case sensitive and must be unique within its tab set. *Tab set* means all tabs at the same level, excluding sub-tabs (which are members of their own tab sets). The Name must also be unique among sub-pages of the containing page.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

The tab Name is used in path-based URLs to access the tab.

Note: For more information on the formation of URLs, see [Appendix C, "Formation of URLs in Oracle Portal"](#).

7. In the **Display Name** field, enter the text to display on the tab.

Enter up to 256 characters of any kind. The Display Name defaults to *New Tab* if unspecified. When you use your own tab images, rather than the default image supplied by Oracle Portal, the Display Name is used as Alt text when users move their mouse pointers over the tab. When you use your own tab images, the images must include whatever text you care to display.

Note: For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

8. Click **OK** to save your changes and return to the page.

10.3.3 Rearranging the Order of Tabs in a Region

In perfecting or updating your page design, you may find that the original display order of a tab set requires rearrangement. In Oracle Portal it is a simple process to rearrange the order of tabs.

Note: To rearrange tabs on a page, you must have at least the page privilege *Manage Content*. However, if you can personalize a page, you can also rearrange the order of tabs in your own view of a page.

To rearrange the order of tabs:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tabs are located.

This opens the page in Edit mode.

5. Click the **Arrange Tabs** icon in the relevant region ([Figure 10-42](#)).

Figure 10-42 *The Arrange Tabs Icon*



This opens the Arrange Tabs page.

6. In the **Arrange Tabs** list, select a tab and use the Move icons to reorder it in relation to the other tabs in the list.
7. Repeat step 6 for the tabs to be rearranged.
8. Click **OK** to save your changes and return to the page.

10.3.4 Hiding/Showing Tabs

In some situations, you may want to hide a tab from users. For example, you may want to work on a tab before you make it available to other users. When you hide a tab, other users cannot see the tab when they view the page; however, as the tab's creator, you can see and work with it in Edit mode. Some users will be able to see the tab when they edit or personalize the page, but it will be identified as a hidden tab, and they cannot access it.

System level caching options affect whether a hidden tab is visible in the Graphical view of page Edit mode. This is because when the page definition or the fully assembled page content is cached at the system level, the same information is rendered from the same source for all users:

- On pages cached at the user level, hidden tabs display (as *Hidden*) only to users with a minimum of the page or tab privilege *Manage Content*. Hidden tabs do not display to other users.
- On pages where the page definition only is cached at the system level, hidden tabs display (as *Hidden*) only to users with a minimum of the page or tab privilege *Manage Content*. Hidden tabs do not display to other users.
- On pages cached at the system level for a specified period (expiry caching), hidden tabs display (as *Hidden*) to all users.

Note: To hide or show a tab on a page, you must have at least the page privilege *Manage*. However, when you have personalization privileges on a page, you can hide and show tabs when you personalize the page.

When you hide tabs as you personalize a page, tabs are hidden only in your view of the page; other users are still able to see the tabs.

This section describes how to hide one or more tabs. It contains the following subsections:

- [Section 10.3.4.1, "Hiding and Showing a Tab"](#)
- [Section 10.3.4.2, "Hiding and Showing Multiple Tabs at Once"](#)

10.3.4.1 Hiding and Showing a Tab

To hide a single tab:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tab is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tab is located.

This opens the page in Edit mode.

5. Click the **Actions** icon on the tab to be hidden (Figure 10–43).

Figure 10–43 The Actions Icon



This opens the Select Action page.

6. Click the **Hide** link.

The tab displays grayed out in Edit mode. If you switch back to View mode, the tab no longer displays. You can still edit the tab in Edit mode and show it again, if required.

To show a hidden tab, click the **Actions** icon on the tab (see Figure 10–43), and select **Show**.

10.3.4.2 Hiding and Showing Multiple Tabs at Once

To hide more than one tab:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page on which the tabs are located.

This opens the page in Edit mode.

5. Click the **Editing Views: Layout** link in the toolbar at the top of the page.
6. In Layout view, select the check box next to any tabs you want to hide.
7. Click the **Hide** button next to **Actions** at the top of the page.

To show a hidden tab (in Layout view), select the check box next to any tab you want to display, and click the **Show** button next to **Actions** at the top of the page.

10.3.5 Changing the Alignment of Tabs

You can specify whether tabs display on the left or right side of a region. Additionally, you can specify that they display at a region's start or end. This enables you to automatically shift tab display according to the reading direction of the current portal language. This is particularly useful in environments where you must accommodate bidirectional languages.

You can align only pre-existing tabs. That is, you cannot preset tab alignment before you have created any tabs.

Figure 10–44 shows the same region with different tab alignment settings:

Figure 10–44 Same Region Shown with Different Tab Alignment Settings

To change tab alignment:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tabs are located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region where the tabs are located (Figure 10–45).

Figure 10–45 The Edit Region Icon

Note: Be sure to click the icon in the tabbed region itself (that is, the icon to the right of the tabs), not in a region within the tab.

6. On the resulting page, select an alignment option from the **Tab Alignment** list.

Choose from:

- **Left** to align tabs against the left border of the region
- **Right** to align tabs against the right border of the region
- **Start** to align tabs according to reading direction of the portal's current language: in languages that read left to right, Start aligns tabs left; in languages that read right to left, Start aligns tabs right
- **End** to align tabs according to the reading direction of the portal's current language: in languages that read left to right, End aligns tabs right; in languages that read right to left, End aligns tabs left

Note: When you add a tab to a center-aligned region, the tab is initially centered—even though *Center* is not a tab alignment option. To change the alignment of the tab, edit the tab region and click OK. You may note that when you edit the tab region, left-alignment is already selected for the region. Nonetheless, the tab does not initially display left-aligned because it has taken its defaults from the region from which it was created.

7. Click **OK** to return to the page.

10.3.6 Changing a Tab Image

With some page designs, you may want to use your own tab images in lieu of the default images provide by Oracle Portal. Add images for both active and inactive tabs. The active image displays when the tab is selected; the inactive image displays when the tab is not selected. Additionally, you can add a rollover effect so that the active image displays on an inactive tab when a user moves the mouse pointer over the tab (see [Section 10.3.7](#)).

If you do not want a visual difference between active and inactive tabs, you can add just the active tab image. This will be used for both active and inactive tabs.

When tab images other than the default tab images are used, the tab display name is not displayed on the tab, as it is with default tab images. Instead, the display name is used as Alt text, which pops up when a user rolls the mouse pointer over an inactive tab. If you want tabs that use images other than default tab images to be labeled, you must provide images that include their own label text

Note: To change a tab image, you must have at least the tab privilege *Manage* on the relevant tab. However, if you have full personalization privileges on a page, you can change the images of the tabs you add when you personalize the page. When personalizing, you cannot upload tab images for tabs that you did not create yourself.

The image must be a type that can be viewed in a browser, for example, JPEG or GIF.

To change tab images:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tabs are located.

This opens the page in Edit mode.

5. Click the **Edit Tab** icon on the relevant tab ([Figure 10–46](#)).

Figure 10–46 *The Edit Tab Icon*



This opens the Edit Tab page.

Note: Be sure to click the Edit icon that displays directly on the tab, rather than the one that displays next to or beneath the tab.

6. Click the **Browse** button next to the **Active Tab Image** field to locate and select a graphic to display on the foremost tab.

Alternatively, you can manually enter the location and file name of the image, for example:

c:\webimages\maintab_on.gif

7. Optionally, click the **Browse** button next to the **Inactive Tab Image** field to locate and select a graphic to display on tabs that are not foremost.

Alternatively, you can manually enter the location and file name of the image, for example:

c:\webimages\maintab_off.gif

Note: Provide an inactive tab image if you want the tab to look different when it is not the currently selected tab or if you want to use a rollover effect (see [Section 10.3.7](#)). Otherwise, an inactive tab image is not required for the tab image option to work.

8. Click **OK** to save your changes and return to page.

To delete a tab image, take Steps 1 through 5, then click the **Delete** icon next to the image. (The delete icon displays only when there is a tab image other than a default tab image.)

10.3.7 Adding a Rollover Effect to Tabs

With a rollover effect, an inactive tab image switches to an active tab image when users move their mouse pointers over the tab. You can add a rollover effect to a tab by enabling the rollover effect in the tab region and applying active and inactive images to the tabs.

For the rollover effect to work properly, you must add active and inactive tab images other than default tab images (see [Section 10.3.6](#)), and there must be at least one tab on the page. That is, you cannot preconfigure a rollover effect before any tabs are created. The rollover effect executes in page View mode, but not in page Edit mode.

To add a rollover effect to a tab:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tabs are located.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the relevant tab region ([Figure 10-47](#)).

Figure 10-47 *The Edit Region Icon*



Note: Be sure to click the icon in the tab region itself (that is, the icon to the right of the tabs), rather than the one on or beneath the tab.

6. On the resulting page, go to the **Region Display Options** section, and select **Use Rollover Effect For Tab Images**.
7. Click **OK** to save your changes and return to the page.
8. Edit each tab to specify active and inactive images (see [Section 10.3.6](#)).

The active tab image executes in View mode when users move their mouse pointers over an inactive tab.

10.3.8 Deleting Tabs

The task of deleting a tab is straightforward and simple; however, there are a few things to consider before you proceed. When you delete a tab that includes content, the content is deleted along with the tab. There is no opportunity to move the content during the delete operation. Be sure to move any content you want to keep before you delete a tab.

Additionally, if the tab is derived from a template, you can delete the tab only if you also have delete content privileges on all the tabs on pages that are based on the template. This is to prevent users without the appropriate privileges from managing content.

You can delete one tab at a time or multiple tabs at once. This section describes how to do both. It contains the following subsections:

- [Section 10.3.8.1, "Deleting One Tab"](#)
- [Section 10.3.8.2, "Deleting Multiple Tabs Simultaneously"](#)

Note: To delete a tab from a page, you must have at least the page privilege *Manage* on the parent page, that is, on the page that contains the tab you are deleting, or on the tab that contains the sub-tab you are deleting.

If you have full personalization privileges on a page, you can delete any tabs you create when you personalize the page; but you cannot delete tabs that you did not create.

10.3.8.1 Deleting One Tab

To delete a single tab from a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tab is located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tab is located.

This opens the page in Edit mode.

5. Click the **Actions** icon on the tab to be deleted ([Figure 10-48](#)).

Figure 10–48 The Actions Icon



This opens the Select Action page.

6. Click the **Delete** link.
7. In the confirmation page, click **Yes**.
The tab and all of its content are deleted.

10.3.8.2 Deleting Multiple Tabs Simultaneously

To delete multiple tabs simultaneously:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page where the tabs are located.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page where the tabs are located.

This opens the page in Edit mode.

5. Click the **Editing Views: Layout** link in the toolbar at the top of the page.
6. In Layout view, select the check box next to each tab you want to delete.
7. Click **Delete**.
8. In the confirmation page, click **Yes**.

All of the selected tabs and their content are deleted.

10.4 Troubleshooting Regions and Tabs

The Browse Users icon does not display on the Access tab

The portal administrator may have run the script `serlACL.sql` to enforce role-based security. Role-based security limits privilege grantees to groups; individual users cannot be granted privileges. The script does not affect privileges granted to users before it was run, only after. Once this script is run, the Browse Users icon does not display next to the Grantee field on Access tabs. Additionally, the Privileges tab does not display on the Edit Portal User Profile page.

For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

The Arrange Items icon does not display.

The **Sort By** Item Display Option has been set to *Title* or *Size*. When a sorting option is selected, the Arrange Items icon no longer displays on the region in page Edit mode. If you have sufficient privileges, you can edit the region and select *Default* under **Sort By** in the Item Display Options. When *Default* is the Sort By option, privileged users and groups are free to rearrange items.

I cannot apply styles to my regions; the Styles tab does not display on the Edit Region page.

Is the region a portlet region? Portlet regions cannot have their own style.

It might also be privilege-related. It is not enough to have the page privilege *Manage*, the page group option **Allow Privileged Users to Manage Styles** must also be selected for you to be able to change region styles. Ask your page group or portal administrator either to select this option for the page group, or to grant you a higher level of privilege, for example, the page group privilege *Manage Styles*.

I granted a privilege to a user and clicked Apply, but the privilege was not granted.

When you grant a privilege, before you click **Apply** or **OK**, you must first click **Add** next to the Grantee field.

What controls are available for sub-page links regions?

Sub-page links regions have controls at the page and region levels.

At the page level, you can choose specific sub-pages to include or omit from display and you can select to display sub-page links alphabetically. These controls are on the **Optional** tab of page properties. For more information, see [Section 7.9, "Defining the Display of Sub-Page Links"](#).

At the region level, you can specify whether one or two levels of sub-pages display, provide a character to separate pages listed at the secondary sub-page level, select the attributes to display with each sub-page link, and choose the default or another icon that users click to navigate up the sub-page hierarchy. These controls are available when you edit a sub-page link region's properties. For more information, see [Section 10.2.7, "Setting Sub-Page Links Region Properties"](#).

I want to publish a page as a portlet, but I don't want every region on the source page to display.

1. Go to the page on which the page portlet is placed.
2. Click the page portlet's **Edit Defaults** icon.
3. Select **Display Selected Regions**.
4. Check only those regions that should be displayed in the page portlet.
5. Click **OK**.

My page portlet is using the style of the target page rather than the style of its source page, as I have specified.

Page portlets always take their header and border colors from the page on which they are placed. This is because the display of headers and borders is controlled on the target page, rather than from any values set for the source page's style.

One way around this is to edit the region in which the page portlet is placed and turn off the display of portlet headers and borders. If the page portlet contains its own portlets, you must also turn off the display of headers and borders for regions on the page portlet's source page.

For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

Portlet background colors usually are specified by the style that is applied to the page on which the portlets are placed. With a page portlet, there is a way to display the source page's background color. Edit the style that is applied to the page on which the

page portlet is placed (the target page). For the style element Portlet Body Color, remove the value from the Background Color field, and click Apply. The background color specified for the page portlet's source page (that is, Background Color property of the Common style element) displays.

To illustrate this for yourself, create a page named *Source* and a page named *Target*. Create a *Source Style* for the Source page and a *Target Style* for the Target page. Set all the color values for Source Style to the red end of the color palette. Set all the color values for Target Style to the blue end of the color palette.

Tip: When you edit styles, a quick way to move from style element property to style element property is to click the style element property in the Preview section of the Edit Style page. This selects the style element property and displays all of its values for editing

Add some portlets and items to the Source and Target pages. Publish the Source page as a portlet. Place the Source page portlet onto the Target page.

For the Source page, experiment with selecting and de-selecting **Use Style Of Page On Which Portlet Is Placed**, and viewing the result on the Target page. Also, experiment with specifying and clearing the value field for the **Background** property of Target Style's **Common** style element.

How can I display portlet headers and borders on one portlet but not on another?

Put the portlets in different regions. Turn portlet headers and borders on in one region. Turn them off in another.

I was editing a page and I wanted to collapse portlets, but those controls were not visible.

The Collapse/Restore, Remove, and Personalize links do not display in Edit mode because editing and personalizing are different types of tasks. These links display in View mode.

When you want to edit a page without too much distraction from its existing content, consider switching from Graphical view to List or Layout view.

Is there a way to rearrange regions on a page?

Not directly. There is no drag-and-drop capability with regions. However, you can move content and delete and add regions pretty easily to achieve this effect. For example, in List view of page Edit mode, move all content to one region, which will act as a holding region. Delete the undesirable empty regions, then add regions in the desired layout. Finally, move the content from the holding region into their target home regions.

How do I add an item region to my view of a page?

You cannot add an item region when you personalize a page. One way around this is to upload the items to a page on which you have Edit privileges, for example a personal page. Then personalize the original page, add the Favorites portlet to it, then add links to your items to the Favorites portlet. For information on working with the Favorites portlet, see [Section A.5.1, "Working with the Favorites Portlet"](#). For information on adding a portlet to a page, see [Section 2.3.1, "Adding a Portlet to a Page"](#).

How do I get new regions to have exactly the same configuration as the region it was created from?

In most cases, a new region defaults to an undefined region. Change the region to the same type as the region that it was created from, and it will have the same property values and attributes or HTML content layout template selection as specified for the original region.

I want to add content to a region but get the message: *Content cannot be added to this region because the region type is undefined*

The region comes from a Portal Template, where the region type is not defined. Either define the region types on the applied Portal Template (see [Section 12.2.1.3, "Editing Portal Templates for Pages"](#)), or detach the page from the template (see [Section 12.2.1.4, "Detaching a Portal Template from a Page"](#)).

Why can't I add content to a region?

You may not have sufficient privileges to add content. You must have at least the page (or tab) privilege *Manage Content* or *Manage Items with Approval* on the page or on the tab that contains the region.

If the page is based on a Portal Template, and the template region is locked, no one can add content to the region, unless they do so through a WebDAV client. If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To unlock a region:

1. Open the page or Portal Template in Edit mode, and edit the region.
2. Select **Enable Users To Included Content In This Region**.
3. Click **OK** to save your changes and return to the page or Portal Template.

I've locked a region, but users can still add content to it.

Region locking (by deselecting **Enable Users To Included Content In This Region** on a region) is a way to limit the types of actions users can perform on a region. How it works differs between page regions and template regions.

Once you lock a page region, when users *personalize* the page they cannot add content to the region or hide, show, delete, or move existing content. When users *edit* the page, they can still add, hide, show, delete, and move content.

When you lock a Portal Template region, no user can change the region content on pages that are based on the template. When users edit or personalize a page that is based on a template with locked regions, they will not be able to add content to the region, or hide, show, delete, or move existing content.

My page is not displaying all of my items.

An instance where content can be truncated on a portal page is when the containing region allows for a limited number of rows and columns. For example, if a page has eight items and the containing region is set for two columns and three rows, only six of the items display. The remaining two are truncated.

These truncated items display once the region column or row allowances are expanded. For more information, see [Section 10.2.5, "Changing the Number of Columns and Rows in a Region"](#).

I specified a region to be a particular width, but when I add content, the region is wider.

Region widths and heights never cause content to truncate. No matter what values you set, regions always expand to accommodate content. If exacting region proportions matter to your portal, you must size content to fit your regions.

If you cannot immediately see why the page content is expanding the width of the region, it might be helpful to look at the page source.

I'm creating a translation in a language that reads left to right. How can I configure my page to accommodate this?

Edit your page regions' item alignment options. Item region alignment options include the values *Start* and *End*. Start and End work in conjunction with portals using bidirectional languages. For languages reading right to left, *Start* aligns items right and *End* aligns items left. For languages reading left to right, *Start* aligns items left and *End* aligns items right.

Tab regions also include the Start and End alignment options.

The Display Name I entered for a tab is not displaying on the tab.

Are you using your own tab images, rather than those supplied by Oracle Portal? When you use your own tab images, the images themselves must include the text you want to display. In such cases, the Display Name you enter for the tab in tab properties is used as the tab's Alt text. It displays when users move their mouse pointers over the tab.

I uploaded an image, and set Item Icon Height and Width values for the region, but this had no effect on the image.

Item Icon Height and Width values do not affect image items, but rather Image attributes. That is, they apply to images uploaded in support of the item rather than images used as the item's main content.

For example, when you upload a file item, you have the option of providing a value for the file item's Image attribute. This is the type of image that is affected by a region's Item Icon Height and Width properties.

The base item type *Image*, does not include the Image attribute. Though you could create a custom item type based on the Base Image item type, and include an Image attribute with that.

When I add a tab to a region, it aligns Center, but when I edit the tab region, its alignment option is set to Left. Additionally, Center is not on the list of tab alignment options.

When you add a tab to a center-aligned region, the tab is initially centered—even though *Center* is not a tab alignment option. To change the alignment of the tab, edit the tab region, select an alignment option, and click **OK**. If *Left* is already selected, though the tab is displaying *Center*, clicking **OK** will reset the tab alignment to *Left*.

You may note that when you edit the tab region, left-alignment is already selected for the region. Nonetheless, the tab does not initially display left-aligned because it has taken its defaults from the region from which it was created.

I cannot delete a tab/region from my Portal Template.

You can delete tabs and regions from Portal Templates only if no users have added content to the tab or region on pages that are based on the template. This is to prevent users without the appropriate privileges from managing content.

Working with Colors and Fonts

Oracle Portal provides a set of easy-to-use tools for specifying styles for your portal. Use styles to specify colors and fonts for elements related to portlets, items, tabs, and common elements, such as page backgrounds and region banner colors.

Figure 11-1 Use Styles to Add Color and Text Design to a Page



This chapter discusses how to create, delete, and apply styles. It contains the following sections:

- [Section 11.1, "Understanding Style Basics"](#)
- [Section 11.2, "Creating a Style"](#)
- [Section 11.3, "Style Element Properties"](#)
- [Section 11.4, "Defining Styles for Items"](#)
- [Section 11.5, "Defining Styles for Portlets"](#)
- [Section 11.6, "Defining Styles for Tabs"](#)

- [Section 11.7, "Defining Common Style Elements"](#)
- [Section 11.8, "Applying a Style"](#)
- [Section 11.9, "Making a Style Available to Other Users"](#)
- [Section 11.10, "Editing a Style"](#)
- [Section 11.11, "Deleting a Style"](#)
- [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#)
- [Section 11.13, "Troubleshooting Styles"](#)

Intended Audience

This chapter is intended for users who will work with styles. To apply a style to a page, you must have at least the page privilege *Manage Style* on the relevant page. Additionally, the option **Allow Privileged Users to Manage Page Styles** must be selected for the page's page group.

The page privilege *Manage Style* enables you to create and work with your own styles.

To work with styles that you did not create, you must have at least the page group privilege *Manage Styles* on the relevant page group. With this privilege, you can create styles in any page group, but you can apply styles only to pages on which you have the page privilege *Manage Style*, and only when the option **Allow Privileged Users to Manage Page Styles** is selected for the relevant page group.

If a particular task requires different privileges than those listed here, those privileges will be listed before the steps of that task.

11.1 Understanding Style Basics

A style controls the colors and fonts used by pages and item regions and all the tabs, portlets, and items displayed within them. If you want a page or group of pages to use the same colors and fonts, apply a style. On the other hand, if you want to apply a consistent *layout* to a group of pages, use a template.

Because you can apply a style to a template, you can use a template to provide a standard approach to layout, fonts, and colors.

Note: For information about choosing a default style for a page group, see [Chapter 4, "Working with Page Groups"](#). For information on using templates with Oracle Portal, see [Chapter 12, "Providing a Standard Look and Feel"](#).

You can give all your pages a uniform appearance by applying a single style. This means that you can change the look of all your pages just by changing the style the pages use. If you prefer, you can apply different styles to give each page a distinct look. You can even apply different styles to the item regions within a page.

Use care when editing a style: the changes you make affect the appearance of *all* pages and item regions that use the style. When you delete a style, all pages that use the style revert to the page group default style, or the system default style if the page group default style is **<None>**.

The amount of control you have over the style of a page depends on your page and page group access privileges:

- The portal administrator can perform any action on any style in any page group.

- If you have the page group privilege *Manage Styles*, you can perform any action on any style in the page group.
- If you have the page privilege *Manage* or *Manage Style* and the **Allow Privileged Users To Manage Page Style** check box is selected for the page group, you can apply a different style to the page, edit existing styles to change the colors and fonts used, or create new styles.

If **Allow Privileged Users...** is not selected, only portal administrators or users with the page group privilege *Manage All* or *Manage Styles* can apply a different style to pages in the page group.

- If you have the page privilege *Personalize (Style)* or greater on a page and the **Allow Privileged Users To Personalize Page Style** check box is selected for the page group, you can apply a different style to your view of the page.

If the **Allow Privileged Users To Personalize Page Style** check box is not selected, no user can apply a different style when personalizing a page.

11.2 Creating a Style

In just a few simple steps, you can create a style for your page group—or for all page groups if you create the style in the Shared Objects page group. Once the style is created, the next step is to define it. This section explains how to create a style; subsequent sections explain how to define it.

To create a style:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet Work In drop-down list, select a page group to own the style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If you plan to use this style in more than one page group, create it in the Shared Objects page group.

4. In the Layout & Appearance section, click the **Create** link next to the **Styles** heading.
5. In the **Display Name** field, enter a display name for the style.

Use up to 350 characters of any kind. The display name identifies the style in the Page Groups portlet and the Portal Navigator.

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

6. In the **Copy From** list, select a style that most closely matches the colors and fonts to use in your new style.

This list includes the styles to which you have access privileges, including shared styles and any styles you created.

7. (Optionally) Select **Make available for use in this page group** to make this style available for other users to apply to their own pages, or to use as a starting point for their own styles.

Note: If you do not see this check box, you do not have style publishing privileges. Contact your portal administrator to request these privileges.

8. Click **Create**.

[Section 11.3, "Style Element Properties"](#) provides tables that list and describe the style element properties available for items, tabs, portlets, and common components.

See the following subsections for specifics on designing a style:

- [Section 11.4, "Defining Styles for Items"](#)
- [Section 11.5, "Defining Styles for Portlets"](#)
- [Section 11.7, "Defining Common Style Elements"](#)

Additionally, see [Section 11.10, "Editing a Style"](#) for information on editing styles.

11.3 Style Element Properties

The tables in the following subsections list and describe the types of user interface elements to which you can apply a style. It is divided into the following subsections:

- [Section 11.3.1, "Items"](#)
- [Section 11.3.2, "Tabs"](#)
- [Section 11.3.3, "Portlets"](#)
- [Section 11.3.4, "Common"](#)

11.3.1 Items

[Table 11–1](#) lists and describes style element properties that apply to items.

Table 11–1 Style Element Properties that Apply to Items

Property	Description
Group By Banner	Determines the color, height, and alignment of text in the banners for each group of items in a page.
Group By Text	Determines the color, font face, font size, font style, and font decoration of regular text in the banners for each group of items in a page.
Group By Link	Determines the color, font face, font size, font style, and font decoration of links in the banners for each group of items in a page.
<Other Attributes>	These determine the color, font face, font size, font style, and font decoration of the attributes that appear next to items on the page. For example Category, Create Date, and so on.

11.3.2 Tabs

[Table 11–2](#) lists and describes style element properties that apply to tabs.

Table 11–2 Style Element Properties that Apply to Tabs

Property	Description
Active Tab Color	Determines the color of the currently displayed tab (the active tab).
Active Tab Text	Determines the color, font face, font size, font style, and font decoration of the text on the currently displayed tab (the active tab).
Inactive Tab Color	Determines the color of tabs that are not currently selected (inactive tabs).
Inactive Tab Text	Determines the color, font face, font size, font style, and font decoration of the text on tabs that are not currently selected (inactive tabs).

11.3.3 Portlets

Table 11–3 lists and describes style element properties that apply to portlets.

Table 11–3 Style Element Properties that Apply to Portlets

Property	Description
Portlet Header Color	Determines the color of portlet headers.
Portlet Header Text	Determines the color, font face, font size, font style, and font decoration of regular text in portlet headers.
Portlet Header Link	Determines the color, font face, font size, font style, and font decoration of links in portlet headers.
Portlet Header Style	Determines whether portlet headers have square or rounded edges.
Portlet SubHeader Color	Determines the color of portlet subheaders.
Portlet SubHeader Text	Determines the color, font face, font size, font style, and font decoration of regular text in portlet subheaders.
Portlet SubHeader Link	Determines the color, font face, font size, font style, and font decoration of links in portlet subheaders.
Portlet Body Color	Determines the color of the main body of portlets. Note: To ensure that a Page portlet, a navigation page, or a page that is published as a portlet uses its own background color, rather than the one specified for the portlet’s host page: <ol style="list-style-type: none"> 1. Ensure that the portlet or navigation page uses its own style when it is published as a portlet (that is, do not select the option Use Style of Page on Which Portlet Is Placed in the portlet’s or navigation page’s properties, Optional tab). 2. In the style for the page where you place the portlet or navigation page, clear any value from the Portlet Body Color style element and click Apply.
Portlet Heading n	Determines the color, font face, font size, font style, and font decoration of text in portlets marked with the Portlet Heading n tag. The default list goes to heading level 4.
Portlet Text n	Determines the color, font face, font size, font style, and font decoration of text in portlets marked with the Portlet Text n tag. The default list goes to text level 4.

11.3.4 Common

[Table 11–4](#) lists and describes style element properties that apply to item regions and pages.

Table 11–4 Style Element Properties Common to Item Regions and Pages

Property	Description
Background	<p>Determines the color or image used for the background of the page or region.</p> <p>Notes:</p> <ul style="list-style-type: none"> When a page uses an HTML page skin template, the page background color is taken from the template and any background color specified in a defined style is ignored. <p>An exception to this is when the page skin uses a class generated by an Oracle Portal style. For example, you can place an Oracle Portal style element class in the <body> HTML tag: <BODY style="margin:0px" class="Bodyid2siteid0">. Should you change the style declaratively, through the Oracle Portal user interface, the change is reflected as well in the template that references the style class.</p> <p>This enables you to change the Background Color of all pages that use the page skin through the declarative style. (For more information on Oracle Portal style element classes, see Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs".)</p> <ul style="list-style-type: none"> If you enter a hexadecimal color value that does not also appear in the color palette, tabs and portlets do not display with rounded corners.
Region Banner	Determines the color, height, and alignment of text in the banners for each region in a page.
Region Banner Text	Determines the color, font face, font size, font style, and font decoration of regular text in the banners for each region in a page.

11.4 Defining Styles for Items

You can change the colors and fonts used for item attributes (for example, Display Name, Create Date, and any custom attributes) by editing the style used by the page or item region that contains them. You can have different color and font settings for each attribute.

[Figure 11–2](#) shows the same item region with different item attribute color and font settings.

Figure 11–2 Same Item Region with Different Styles

[Sample Item 1](#) Date Updated: 25-OCT-2001

[Sample Item 1](#) Date Updated: 25-OCT-2001

[Sample Item 2](#) Date Updated: 25-OCT-2001

[Sample Item 2](#) Date Updated: 25-OCT-2001

Note: To change which attributes are displayed in a region, see [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#).

Use care when changing a style: the changes you make affect the appearance of *all* pages and sub-page, tab, and item regions that use the style.

To change item attribute colors and fonts:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited. This opens the Properties tab of the Edit Style page.

5. In the **Style Element Type** section, choose **Items**.

6. In the **Style Element Properties** section, select the element to define.

For a list and description of the style element properties relevant to items, see [Section 11.3.1, "Items"](#).

Tip: You can also select a style element by clicking it in the **Preview** section.

7. To select a color, click a color in the color palette or enter the color's hexadecimal value in the **Color** field.

Clicking in the palette automatically populates the **Color** field with the color's hexadecimal value.

8. Select a **Font Decoration**:

- **<None>** for no decoration (see the following Note)
- **Plain** for no decoration (see the following Note)
- **Underline** for underlined text
- **Line-Through** for lined-out text
- **Underline Linethrough** for underlined text that is also lined out

Note: The *Plain* and *<None>* selections provide the same effect for most item-types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
 - When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.
-
-

9. Select a **Font Face**.

The <Default> font face renders text in the default font specified by the user's browser.

10. Specify a **Font Size** and select a unit of measurement:

- **px** fixed unit (pixels, though relative to the viewer's monitor)
- **pt** fixed unit (points)
- **em** relative unit (relative to the font size of the last specified font)
- **ex** relative unit (relative to the "X" size of the last specified font)
- **%** relative unit (relative to the font size of the last specified font)

11. Select a **Font Style**:

- Plain
- **Bold**
- *Italic*
- ***Bold Italic***

12. Click **Apply**.

Your changes are saved, and the **Preview** section is refreshed to show your color and font selections.

13. Edit each style element as desired.

Click **Apply** after changing each element.

14. Click **Close** to return to the Page Groups portlet.

11.5 Defining Styles for Portlets

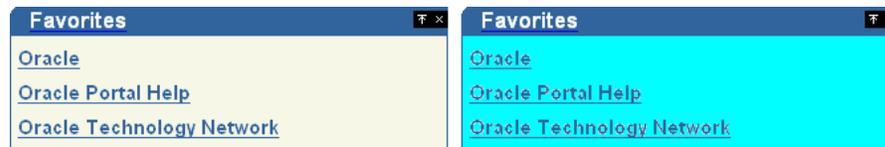
The following subsections explain how to change the colors and fonts that define the style of portlets:

- [Section 11.5.1, "Changing the Portlet Body Color"](#)
- [Section 11.5.2, "Changing Portlet Header Colors, Fonts, and Edges"](#)
- [Section 11.5.3, "Changing Portlet Heading and Text Colors and Fonts"](#)
- [Section 11.5.4, "Controlling Styles for Page Portlets and Navigation Pages"](#)

11.5.1 Changing the Portlet Body Color

You can use background (or body) colors to draw attention to a specific functional area on a page or to a specific type of object. For example, you can change the color of the main body of a portlet. To change the body color of a portlet, edit the style used by the page on which the portlet is placed.

[Figure 11–3](#) shows the same portlet with different body color settings.

Figure 11–3 Same Portlet with Different Body Color Settings

Hand-coded portlets created for Oracle Portal may use their own style instead of the style of the page on which they are placed. In such cases, these portlets will use the style specified when they were created rather than any style you apply.

Use care when changing a style: the changes you make may affect the appearance of *all* the portlets that use the style.

Note: See [Section 11.5.4, "Controlling Styles for Page Portlets and Navigation Pages"](#) for special style considerations for page portlets and navigation pages.

To change the portlet body color:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the style to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.
This opens the Properties tab of the Edit Style page.
5. In the **Style Element Type** section, choose **Portlets**.
6. In the **Style Element Properties** section, choose **Portlet Body Color**.

For a list and description of style element properties relevant to portlets, see [Section 11.3.3, "Portlets"](#).

7. Click a color in the color palette, or enter the color's hexadecimal value in the **Background Color** field, for example #CCFFFF.

Clicking in the palette automatically populates the **Background Color** field with the color's hexadecimal value.

8. Click **Apply**.
The **Preview** section is refreshed to show your color selection.
9. Click **Close** to save your changes and exit the Edit Style page.

11.5.2 Changing Portlet Header Colors, Fonts, and Edges

You can change the colors and fonts used in a portlet header by editing the style that is applied to the page on which the portlet is placed. You can also change the appearance

of the edges of the portlet header from square to rounded to rounded on one edge or the other.

Figure 11–4 shows the same portlet with different header color and edge settings. The setting for portlet header colors also controls the color of portlet borders.

Note: See Section 11.5.4, "Controlling Styles for Page Portlets and Navigation Pages" for special style considerations for portlet headers and borders.

Figure 11–4 The Same Portlet with Different Settings for Header Color and Edges



Use care when changing a style: the changes you make affect the appearance of *all* pages and sub-page, tab, and item regions that use the style.

To change the portlet header or sub-header:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.

This opens the Properties tab of the Edit Style page.

5. In the **Style Element Type** section, choose **Portlets**.
6. To change the colors and fonts of the portlet headers:
 - a. In the **Style Element Properties** section, choose one of the following:

- Portlet Header Color

This element controls the background color of the portlet header. It also controls the colors of portlet borders. Portlet headers and borders always use the colors defined for the style applied to the page that contains the portlet.

- Portlet Header Text

This element controls the Display Name of the portlet as it appears in the portlet header

- Portlet Header Link

This element controls the appearance of any link that may display in the portlet header. Such links include *Help*, *Personalize*, and *About*.

- Portlet SubHeader Color
This element controls the background color of the portlet sub-header.
- Portlet SubHeader Text
This element controls the appearance of any text that may display in the portlet sub-header.
- Portlet SubHeader Link
This element controls the appearance of any links that may display in the portlet sub-header.

You can also select a style element by clicking it in the **Preview** section.

For a list and description of style element properties relevant to portlets, see [Section 11.3.3, "Portlets"](#).

- b. Click a color in the color palette, or enter the color's hexadecimal value in the **Color** field, for example #CCFFFF.
Clicking in the palette automatically populates the **Color** field with the color's hexadecimal value.
- c. Select a **Font Decoration**:
<None> for no decoration (see the following Note)
Plain for no decoration (see the following Note)
Underline for underlined text
Line-Through for lined-out text
Underline Linethrough for underlined text that is also lined out

Note: The *Plain* and <None> selections provide the same effect for most item types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
 - When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.
-

- d. Select a **Font Face**.
The <Default> font face renders the text in the default font specified by the user's browser.
- e. Specify a **Font Size** and select a unit of measurement:
px fixed unit (pixels, though relative to the viewer's monitor)
pt fixed unit (points)
em relative unit (relative to the font size of the last specified font)
ex relative unit (relative to the "X" size of the last specified font)
% relative unit (relative to the font size of the last specified font)

- f. Select a **Font Style**:
 - Plain
 - Bold**
 - Italic*
 - Bold Italic***
 - g. Click **Apply**.
The **Preview** section is refreshed to show your color and font selections.
7. To change the edges of the portlet header:
- a. In the Style Element Properties section, choose **Portlet Header Style**.
 - b. Click a radio button to select an edge:

Figure 11–5 Normal: Two Square Edges



Figure 11–6 Rounded: Two Rounded Edges



Figure 11–7 Rounded Left Edge



Figure 11–8 Rounded Right Edge



- c. Click **Apply**.
The **Preview** section is refreshed to show your selection.
8. Edit each of the portlet header style elements as desired.
Click **Apply** after changing each element.
9. Click **Close** to save your changes and exit the Edit Style page.

11.5.3 Changing Portlet Heading and Text Colors and Fonts

Oracle Portal provides four levels of heading and text attributes for use in developing portlets. If you view the source of any Oracle Portal page, you'll see that the portlets were written using Portlet Heading1 and Portlet Text1. For example, the Favorites portlet uses the Portlet Heading1 style element for favorite links.

You can provide a distinctive look to your portal by working with the colors and fonts that are applied to portlet headings and text. Change the colors and fonts used with portlet headings and text by editing the style that is applied to the page on which the portlet is placed.

[Figure 11–9](#) shows the Favorites portlet with different Portlet Heading1 color settings.

Figure 11–9 Favorites Portlet with Different Portlet Heading1 Color Settings

For information about how to use these style elements in your own portlets, see the Portal Developer Kit page on the Oracle Technology Network (OTN), http://www.oracle.com/technology/products/ias/portal/portlet_development_10g1014.html. For information on Oracle Portal style classes, which you can use with your own developed portlets, see [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).

Use care when changing a style: the changes you make affect the appearance of *all* pages and sub-page, tab, and item regions that use the style.

To change portlet heading and text colors and fonts:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the style to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited. This opens the Properties tab of the Edit Style page.
5. In the **Style Element Type** section, choose **Portlets**.
6. In the **Style Element Properties** section, choose **Portlet Heading n** or **Portlet Text n** , where n is the desired level.

You can also select the portlet heading or text style element by clicking it in the **Preview** section.

For a list and description of style element properties relevant to portlets, see [Section 11.3.3, "Portlets"](#).

7. Click a color in the palette, or enter a hexadecimal value in the **Color** field, for example #FFCC00.

Clicking in the palette automatically populates the **Color** field with the color's hexadecimal value.

8. Select a **Font Decoration**:
 - **<None>** for no decoration (see the following Note)
 - **Plain** for no decoration (see the following Note)
 - **Underline** for underlined text
 - **Line-Through** for lined-out text
 - **Underline Linethrough** for underlined text that is also lined out

Note: The *Plain* and *<None>* selections provide the same effect for most item-types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
 - When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.
-
-

9. Select a **Font Face**.

The **<Default>** font face renders the text in the default font specified by the user's browser.

10. Specify a **Font Size** and select a unit of measurement:

- **px** fixed unit (pixels, though relative to the viewer's monitor)
- **pt** fixed unit (points)
- **em** relative unit (relative to the font size of the last specified font)
- **ex** relative unit (relative to the "X" size of the last specified font)
- **%** relative unit (relative to the font size of the last specified font)

11. Select a **Font Style**:

- Plain
- **Bold**
- *Italic*
- ***Bold Italic***

12. Click **Apply**.

The **Preview** section is refreshed to show your color and font selections.

13. Edit the style elements as desired.

Click **Apply** after changing each element.

14. Click **Close** to save your changes and exit the Edit Style page.

11.5.4 Controlling Styles for Page Portlets and Navigation Pages

Regardless of whether a page portlet or navigation page uses its source page's style, they always render their headers and borders using the style of the page on which they are placed. This is true even when you specify the use of the style that was defined for the page portlet or navigation page's source page.

If you do not want to use the container page's header and border colors on a page portlet or navigation page, you can turn off the display of headers and borders at the region level on the container page. If the page portlet or navigation page also contains its own portlets, you must also turn off the display of headers and borders for portlet regions on the source pages of those portlets.

Note: For more information on turning off the display of headers and borders for portlet regions, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

If the *Portlet Background Color* style element that is applied to the container page is set to a specific value, rather than left blank, the setting for the **Use Style Of Page On Which Portlet Is Placed** option is ignored for the page portlet, though not for portlets that may be placed on the page portlet's source page.

To ensure that a page portlet or navigation page uses its own background color, rather than the one specified for the page on which it is placed:

1. Ensure that the page portlet or navigation page uses its own style when it is published as a portlet (that is, do not select the **Use Style Of Page On Which Portlet Is Placed** option for the page or navigation page that you are using as a portlet).
2. In the style that is used by the container page (that is, the page where you place the page portlet or navigation page), leave the value for the *Portlet Body Color* style element blank.

11.6 Defining Styles for Tabs

Another way to add distinction to your portal is through judicious selection of the colors, fonts, and images to use with tabs. Change tab colors and fonts by editing the style used in the region that contains the tabs. For information on how to add tab images, see [Section 10.3, "Working with Tabs"](#). For information on applying a style to tabs, see [Section 11.8.2, "Applying a Style to a Region"](#).

[Figure 11–10](#) shows the same tabs with different color and font settings.

Figure 11–10 Same Tabs with Different Color and Font Settings



Use care when changing a style: the changes you make affect the appearance of *all* pages and sub-page, tab, and item regions that use the style.

To change tab colors and fonts:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited. This opens the Properties tab of the Edit Style page.
5. In the **Style Element Type** section, choose **Tabs**.

6. In the **Style Element Properties** section, choose a tab style element to define.
For a list and description of style elements that are relevant to tabs, see [Section 11.3.2, "Tabs"](#).
7. Click a color in the color palette, or enter a hexadecimal value in the **Color** field.
Clicking in the palette automatically populates the **Color** field with a hexadecimal value.
8. Select a **Font Decoration**:
 - **<None>** for no decoration (see the following Note)
 - **Plain** for no decoration (see the following Note)
 - **Underline** for underlined text
 - **Line-Through** for lined-out text
 - **Underline Linethrough** for underlined text that is also lined out

Note: The *Plain* and *<None>* selections provide the same effect for most item-types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
 - When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.
-
-

9. Select a **Font Face**.
The **<Default>** font face renders the text in the default font specified by the user's browser.
10. Specify a **Font Size** and select a unit of measurement:
 - **px** fixed unit (pixels, though relative to the viewer's monitor)
 - **pt** fixed unit (points)
 - **em** relative unit (relative to the font size of the last specified font)
 - **ex** relative unit (relative to the "X" size of the last specified font)
 - **%** relative unit (relative to the font size of the last specified font)
11. Select a **Font Style**:
 - Plain
 - **Bold**
 - *Italic*
 - ***Bold Italic***
12. Click **Apply**.
The **Preview** section is refreshed to show your color and font selections.
13. Edit the tab style elements as desired.

Click **Apply** after changing each element.

14. Click **Close** to save your changes and exit the Edit Style page.

11.7 Defining Common Style Elements

In addition to the specific style elements that belong to tabs, portlets, and items, you can define the appearance and fonts used for common elements, such as banners or page or item region backgrounds. Define background images and colors for an item region or a page, the height and alignment of banners, and banner colors and fonts.

This section describes how to define the colors and fonts for commonly used style elements. It includes the following sub-sections:

- [Section 11.7.1, "Changing the Page or Region Background"](#)
- [Section 11.7.2, "Designing Styles for Banners"](#)

11.7.1 Changing the Page or Region Background

You can select a background color or image for a page or an item region by editing the style it uses.

Note: When a page uses an HTML page skin template, the page background color is taken from the template and any background color specified in a defined style is ignored.

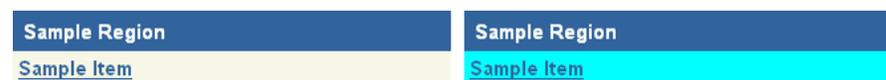
An exception to this is when the page skin uses a class generated by an Oracle Portal style. For example, you can place an Oracle Portal style element class in the <body> HTML tag: <BODY style="margin:0px" class="Bodyid2siteid0">. Should you change the style declaratively, through the Oracle Portal user interface, the change is reflected as well in the template that references the style class.

This enables you to change the Background Color of all pages that use the page skin through the declarative style. (For more information on Oracle Portal style element classes, see [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).)

For the Background property of the Common style element, if you enter a hexadecimal color value that does not also appear in the color palette, tabs and portlets do not display with rounded corners.

[Figure 11–11](#) shows the same item region with different background color settings.

Figure 11–11 Same Item Region with Different Background Color Settings



If your background image is smaller than the page or item region, it will repeat as a pattern to cover the whole page or region.

Use care when changing a style: any changes you make affect the appearance of *all* pages and sub-page, tab, and item regions that use the style.

To change the page or item region background:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.
This opens the Properties tab of the Edit Style page.
5. In the **Style Element Type** section, select **Common**.
6. In the **Style Element Properties** section, select **Background**.
For a list and description of style element properties relevant to common elements, see [Section 11.7, "Defining Common Style Elements"](#).
7. Click a color in the color palette, or enter a hexadecimal value in the **Background Color** field, for example #CC9999.

Clicking in the palette automatically populates the **Background Color** field with a hexadecimal value. If you enter a hexadecimal color value that does not also appear in the color palette, tabs and portlets do not display with rounded corners.

8. To apply an image to the background of the page or region, click the **Browse** button next to the **Background Image** field to locate the image on your file system.
Alternatively, enter the name and location of the image you want use in the **Background Image** field, for example:

```
c:\webimages\pagebg.gif
```

The image file must be of type JPEG, GIF, or PNG.

Tip: To delete a background image, click the **Delete** icon next to the image.

9. Click **Apply**.
The **Preview** section is refreshed to show your color and image selections.
10. Click **Close** to save your changes and exit the Edit Style page.

11.7.2 Designing Styles for Banners

You can call out page areas that are dedicated to specific topics or purposes by adding colorful, labeled banners to item regions. Control the text alignment and the thickness and color of a banner by editing the style that is applied to the item region.

This section describes how to change banner thickness, color, and text alignment for item region banners. It contains the following subsections:

- [Section 11.7.2.1, "Changing Banner Thickness and Text Alignment"](#)
- [Section 11.7.2.2, "Changing Banner Colors and Fonts"](#)

11.7.2.1 Changing Banner Thickness and Text Alignment

Figure 11–12 shows the same item region with different height and text alignment settings on the banner.

Figure 11–12 Same Item Region with Different Banner Heights and Text Alignments



Use care when changing a style: any changes you make affect the appearance of every object that uses the style.

To change the height and text alignment of item region banners:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited. This opens the Properties tab of the Edit Style page.
5. Select the element type and property relevant to the type of banner to be changed:

To change banner height and text alignment for the item region:

- a. In the **Style Element Type** section, select **Common**.
- b. In the **Style Element Properties** section, select **Region Banner**.

For a list and description of style element properties relevant to pages and regions, see [Section 11.3, "Style Element Properties"](#).

To change the banner height and text alignment for groups of items:

- a. In the **Style Element Type** section, select **Items**.
- b. In the **Style Element Properties** section, select **Group By Banner**.

You can also select the banner style element by clicking it in the **Preview** section.

6. In the **Height** field, enter the height of the banner in pixels. Set the banner height approximately 20 to 25% greater than the selected text size. For example, if text size is 8, set banner height to 10.
7. From the **Text Alignment** list, select the alignment of banner text (Left, Center, Right).
8. Click **Apply**. The **Preview** section is refreshed to show your height and alignment selections.
9. Edit each of the banner style elements as desired.

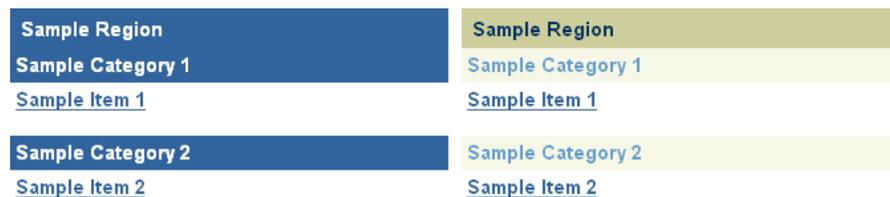
Click **Apply** after changing each element.

10. Click **Close** to save your changes and exit the Edit Style page.

11.7.2.2 Changing Banner Colors and Fonts

Figure 11–13 shows the same item region with different banner and font color settings.

Figure 11–13 Same Item Region with Different Banner Colors



Use care when changing a style: the changes you make affect the appearance of every object that uses the style.

To change banner and font settings:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, look in the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.

This opens the Properties tab of the Edit Style page.

5. Change the colors and fonts for the relevant element:

To change the colors and fonts of the item region banner:

- a. In the **Style Element Type** section, select **Common**.
- b. In the **Style Element Properties** section, select either **Region Banner** or **Region Banner Text**.

For a list and description of style element properties relevant to common elements, see [Section 11.3.4, "Common"](#).

To change the colors and fonts of the Group By banner:

- a. In the **Style Element Type** section, choose **Items**.
- b. In the **Style Element Properties** section, choose either **Group By Banner**, **Group By Banner Text**, or **Group By Banner Link**.

For a list and description of style element properties relevant to pages and regions, see [Section 11.3, "Style Element Properties"](#).

You can also select the banner style element by clicking it in the **Preview** section.

6. Click a color in the color palette, or enter a hexadecimal value in the **Color** field, for example #66FF66.

Clicking in the palette automatically populates the **Color** field with a hexadecimal value.

7. Select a **Font Decoration**:

- **<None>** for no decoration (see the following Note)
- **Plain** for no decoration (see the following Note)
- **Underline** for underlined text
- **Line-Through** for lined-out text
- **Underline Linethrough** for underlined text that is also lined out

Note: The *Plain* and *<None>* selections provide the same effect for most item-types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
 - When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.
-

8. Select a **Font Face**.

The **<Default>** font face renders the text in the default font specified by the user's browser.

9. Specify a **Font Size** and select a unit of measurement:

- **px** fixed unit (pixels, though relative to the viewer's monitor)
- **pt** fixed unit (points)
- **em** relative unit (relative to the font size of the last specified font)
- **ex** relative unit (relative to the "X" size of the last specified font)
- **%** relative unit (relative to the font size of the last specified font)

10. Select a **Font Style**:

- Plain
- **Bold**
- *Italic*
- ***Bold Italic***

11. Click **Apply**.

The **Preview** section is refreshed to show your color and font selections.

12. Edit each of the banner style elements as desired.

Click **Apply** after changing the color or font of each element.

13. Click **Close** to save your changes and exit the Edit Style page.

11.8 Applying a Style

You can apply styles to pages, tabs, and regions. On pages, you can apply styles explicitly and by default. This section describes the various ways to apply styles. It includes the following subsections:

- [Section 11.8.1, "Applying a Style to a Page"](#)
- [Section 11.8.2, "Applying a Style to a Region"](#)

11.8.1 Applying a Style to a Page

The style you apply to a page governs the colors and fonts used by the page and its content. You can apply styles to standard pages and to pages of a custom type that is based on a standard page.

This section explores the rules that govern how styles are applied in default situations and describes how to explicitly apply a style. It contains the following sub-sections:

- [Section 11.8.1.1, "Applying a Style by Default"](#)
- [Section 11.8.1.2, "Applying a Style Explicitly"](#)

11.8.1.1 Applying a Style by Default

You can specify that a page must use a user's current default style. The user's view of the page displays in that style. Users set their default style under **Account Info**. For more information, see [Section 2.1.6, "Choosing a Default Page Style"](#).

If you base a page on a Portal Template that does not allow pages to use a different style, your users will not be able to apply a different style to the page when they edit or customize the page.

If you change the style selection for a template, the style selection is also changed for any page that is based on that template. However, if the template allows pages to use a different style, and users have chosen different styles for pages based on the template, changes to the template style selection do not affect these pages.

There is a hierarchical structure to the application of styles when no explicit style is selected. First, it is useful to understand that default styles can be set at the system, page group, and individual user levels.

- The system default is set on the Administer tab in the Services portlet under **Global Settings**.
- The page group default is set in *page group* properties.
- The user default is set by the user under **Account Info**.

Note that the page group default is not automatically applied to the page group root page; you must explicitly specify a style in the root page's *page* properties.

If the page group administrator has selected the page group option to **Copy Parent Page Properties When Creating Page**, new pages created in the page group will (by default) use the same style specified in the parent page's *page* properties (rather than the default style selected in the *page group* properties).

To summarize how default styles are used:

- When page group administrators configure a page group to **Copy Parent Page Properties When Creating a Page**, then sub-pages use the style specified in the *page* properties of the parent page.

- When page group administrators select the option, the page group's default style, specified in *page group* properties, is used for newly created sub-pages.
- When page group administrators select the **Use Default Properties When Creating Page** option, and the page group's default style is set to <None>, then the system default style is applied.
- An individual user's default style is specified in each user's **Account Info** settings. Users go into their personal portal accounts and select a preferred page style. This selection is applied when a page designer explicitly selects the page style <Use User's Default Style>.

User default styles are useful where the page designer creates complimentary styles and configures all of the pages to use the current user's default style. In this example, users make updates to their Account Info style settings, and their entire portal changes to match that color scheme. Many popular Internet Service Providers follow this example, allowing users to select from a series of color schemes for their personal view of the home page.

A hierarchy also controls what default style to use when the user's default is set to <None>:

- If the user's Account Info default style is set to <None>, then the style defined by the user's default group is used. A user's default group is selected in the Account Info settings. The default group's default style is selected through the Portal Group Profile portlet.
- If the group default style is set to <None> or the user has not selected a default group, the page group default style is used.
- If the page group default style is set to <None>, then the system default style is used.

All of this becomes irrelevant when you explicitly apply a style to a page.

11.8.1.2 Applying a Style Explicitly

Note: To apply a style to a page, you must have at least the page privilege *Manage Style* on the page and the page group option **Allow Privileged Users To Manage Page Style** must be enabled. For more information, see [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#).

To apply a style to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the page to be edited.
This opens the page in Edit mode.
5. In the page toolbar at the top of the page, click the **Style** link.

This screen does not display when the page group administrator does not allow users to change styles in the page group.

6. Choose a style from the **Choose Style** list.

Note: The **Choose Style** list includes all styles that you have created in this page group, all styles that were created in this page group by others and that you have privileges to use, and all styles in the Shared Objects page group. The initial selection is the page group's default style.

Additionally, this list includes the choice **<Use User's Default Style>**. With this selection, the style a user chooses through the **Account Info** link will be used. The style each user sees will depend on his or her default style.

The **Current Style** field shows which style is currently applied to the page. The **Style Properties** section includes a preview of the current style's settings.

If you cannot find a style with the color and font settings that you want, and you have the appropriate privileges, you can click the Edit link in the **Style Properties** section to edit an existing style, or the **Create New** link to create a new style.

Tip: Click each of the radio buttons in the **Style Properties** section to preview the colors and fonts provided by the style. The Style Properties section shows the style that is currently selected in the **Choose Style** list.

7. Click **OK** to save your changes and return to the page.

If your changes do not display immediately, edit the style; click the **Main** tab to bring it forward; and click the **Clear Cache** link under **Cache Invalidation**. This will clear the previous style from the cache, allowing the newly-selected style to display. For information on how to edit a style, see [Section 11.10, "Editing a Style"](#).

11.8.2 Applying a Style to a Region

The style you apply to a region governs the colors and fonts used by the region and all the tabs, items, and sub-page links displayed within it. By default, regions use the same style as their parent page. However, you may want to apply a different style to a region to create visual interest.

You can apply a style to item, tab, and sub-page links regions. You cannot apply a style to a portlet region. All portlets on a page use the style that is applied to the page. One exception to this is page portlets. With page portlets, you are given the opportunity to use the source page's style or to use the style of the containing page. Using the style of the containing page works in most cases. The exception is when the source page is provided through the Federated Portal Adapter. In such cases, the setting to use the style of the containing page is ignored. The page portlet uses whatever style is applied to its source.

Note: For more information on styles and portlets, see [Section 11.13, "Troubleshooting Styles"](#).

If your portlets are hand-coded, you can call your own cascading style sheet in lieu of an Oracle Portal style. For more information, see [Section 12.3.3, "Using HTML to Create Templates for Database Portlets"](#). See also, [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).

Note: To apply a style to an item region, you must have at least the page privilege *Manage* on the page, and the option **Allow Privileged Users To Manage Page Style** must be selected for the page's page group.

To apply a style to an item, tab, or sub-page links region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to apply styles.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under **Pages** in the Layout & Appearance section, click the link to the page on which to apply styles.
This opens the page in Edit mode.
5. Click the **Edit Region** icon in the region on which to apply styles ([Figure 11-14](#)).

Figure 11-14 The Edit Region Icon



6. On the resulting page, click the **Style** tab to bring it forward.
This tab does not display when the page group administrator does not allow users to change styles in the page group.
7. Select a style from the **Style** list.
The style is applied to the region, and the **Preview** section is refreshed to show the style's settings.
The **Style** list includes all the public styles in this page group and the Shared Objects page group, as well as any styles that you have created in this page group for your own use.
To use the same style that is applied to the page, select **<Use Page Style>**.
8. Click **Close** to save your change and return to the page.

If your changes do not display immediately, edit the style; click the **Main** tab to bring it forward; and click the **Clear Cache** link under **Cache Invalidation**. This will clear the previous style from the cache, allowing the newly-selected style to display. For information on how to edit a style, see [Section 11.10, "Editing a Style"](#).

When you apply a style to a tab, it controls the colors and fonts of the tabs themselves as well as the region containing the tabs. For this reason, you will want to be judicious in your choice of background colors for styles applied to tab regions. For example, in [Figure 11-15](#), the tab region's background color has been defined for the style. In this example, the selection may not be the best choice for the overall look of the page.

Figure 11–15 Tab Region with Defined Background Color



11.9 Making a Style Available to Other Users

There are two levels for making a style available:

- Publishing a style
- Sharing the style across page groups

When you publish a style, it becomes selectable on style pick lists in the page group that owns the style. When you share a style across page groups, it becomes selectable on style pick lists across all page groups.

This section describes how to publish and share styles. It includes the following subsections:

- [Section 11.9.1, "Publishing a Style to Other Users"](#)
- [Section 11.9.2, "Sharing a Style Across Page Groups"](#)

11.9.1 Publishing a Style to Other Users

You can make any style you create available for use by privileged users within the page group that owns it.

To make a style available within a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant style.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, you will find it under the Shared Objects page group.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.
This opens the Properties tab of the Edit Style page.
5. Click the **Main** tab to bring it forward.
6. Under **Style Usage**, select **Make available for use in this page group**.
7. Click **OK** to save your change and exit the Edit Style page.

11.9.2 Sharing a Style Across Page Groups

Move a style to the Shared Objects page group to make it available for use in all portal page groups.

Note: Objects can be moved to the Shared Objects page group—whose default language is English—from a non-English page group only if the object already has an English translation. This applies to all promotable objects:

- Item types
 - Page types
 - Attributes
 - Styles
 - Categories
 - Perspectives
-
-

To move a style to the Shared Objects page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. Click the **Navigator** link at the top of the page.
This opens the Portal Navigator.
4. In the Portal Navigator, click the **Page Groups** tab to bring it forward.
5. Click the page group link for the page group that contains the style to be moved.
6. On the resulting page, click the **Styles** node.

Only the styles you are authorized to see and the actions you are authorized to perform are displayed.

7. Click the **Moved to shared link** next to the style to be moved to the Shared Objects page group.

11.10 Editing a Style

Editing a style involves almost the same steps you take in creating one. The main differences are in how you access the style and in which style attributes are available for revision.

To edit a style:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, select the page group that owns the style to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Styles** in the Layout & Appearance section, click the style to be edited.

This opens the Edit Style page.

Note: If the style is not included in those listed in the Page Groups portlet, click the **More...** link that displays at the end of the list of styles.

5. Click the **Main** tab to bring it forward.

The attributes available on the Main tab vary a little from the attributes available when you first create the style. Notably, the Main tab includes **Name** and **Description** attributes.

The Name attribute differs from the Display Name attribute both in the way Oracle Portal uses it and in the rules that govern which characters can be used in its formation. Oracle Portal uses the Name internally. The default value in the Name field is taken from the Display Name provided when the style was created. The value is truncated to 65 characters and any spaces and special characters are discarded. Use only alphanumeric characters (A to Z, a to z, and 0 to 9) and underscore (_)

For example, if the Display Name is R&D Style, the Name is RDSTYLE.

The Name must be unique within its page group and the Shared Objects page group. Use up to 65 characters.

6. If you wish, enter a description of the style in the **Description** field.

The style description is available to view when users edit the style. It is not exposed anywhere else.

7. Click the **Properties** tab to bring it forward.

Edit the style properties as described in the previous sections, including:

- [Section 11.3, "Style Element Properties"](#)
- [Section 11.4, "Defining Styles for Items"](#)
- [Section 11.5, "Defining Styles for Portlets"](#)
- [Section 11.6, "Defining Styles for Tabs"](#)
- [Section 11.7, "Defining Common Style Elements"](#)

8. Click the **Main** tab to bring it forward, then click the **Clear Cache** link.

Clearing cache removes all cache entries associated with this style, making the changes you have made take effect immediately.

9. Click **OK** when you are done.

11.11 Deleting a Style

When you delete a style, all pages and item regions that used the style revert to the page group default style. If the page group default style is <None>, all pages and regions revert to the system default style.

You cannot delete the system default style, nor can you delete the style created automatically when a page group is created.

To delete a style, you must either have created the style or have at least the page group privilege *Manage Styles* on the page group that owns the style.

To delete a style:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the style to be deleted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

Tip: If the style is used by more than one page group, it will be in the Shared Objects page group.

4. In the Layout & Appearance section, click the **Browse** link next to the **Styles** heading.

The Portal Navigator opens, displaying a list of the selected page group's styles.

5. Click the **Delete** link next to the style to be deleted.
6. In the confirmation page, click **Yes**.
7. Optionally, click the **Builder** link at the top of the page to return to the Page Groups portlet.

11.12 Using Portal Style Element Classes in HTML Templates and CSSs

In Oracle Portal, there are three typical style scenarios:

- Use styles you create through the portal's user interface.
- Augment portal styles through a combination of Oracle Portal style element classes plus your customizations of them.
- Provide your own custom cascading style sheet (CSS).

This section deals briefly with the second scenario: augmenting portal style element classes.

You may prefer to create custom style sheets using Oracle Portal style element classes in a CSS or embedded between `<style></style>` tags in a portal HTML template. For example, the standard style element class for a portlet header contains a parameter for background color but not for background image:

```
.PortletHeaderColor{Background-Color:#336699;}
```

You can augment the existing class by adding a background image parameter:

```
.PortletHeaderColor{Background-Color:#336699;
Background-Image:url(https://company.us.myco.com:5555/images/FFFFFFr.gif);}
```

Note: When you augment Oracle Portal style element classes with additional parameters, you can no longer use the Oracle Portal declarative interface to maintain the style classes. You must maintain the classes yourself in the HTML or the referenced CSS file.

By customizing Oracle Portal style element classes, you can reduce the amount of coding by simply altering these existing classes.

To ensure that you use the appropriate style classes in your CSS or between your `<style></style>` tags:

- Set all the pages that will use Oracle Portal style element classes to Main style.
Many of Oracle Portal's style element classes use the variables `idn` and `siteidnn`. The `idn` variable refers to the identity of the style being used. The `siteidnn` variable refers to the page group that owns the style. With the Main style, which is owned by the Shared Objects page group, the values of these variables are fixed—and therefore predictable: `id1siteid0`.

One way to ensure that all new pages in a page group use the Main style is to set Main as the page group's default style, then select the page group configuration option **Use Default Properties When Creating Page**. For information on setting this option, see [Section 4.5.2, "Specifying Inheritance Rules for Newly Created Pages"](#). For information on selecting a default style for a page group, see [Section 4.5.3, "Choosing a Default Style for a Page Group"](#). For information on selecting a style for a page, see [Section 11.8, "Applying a Style"](#).

You may want to take the further step of prohibiting users from changing page styles. To do this, edit the relevant page group's properties, deselecting **Allow Privileged Users To Manage Page Style**. For more information, see [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#).

- Create a CSS that includes Oracle Portal style element classes, which you can define according to your own style specifications. Or embed Oracle Portal style element classes in your HTML template (see next bullet).

For a list and description of Oracle Portal style element classes, see [Section E.2, "Stal Styles"](#).

- Create an HTML template that calls the CSS or that includes Oracle Portal style element classes.

In the template, do not use the `#page.style#` tag. The `#page.style#` tag includes Oracle Portal style element classes in the template. This could result in conflict caused by two classes having the same name. For information on creating HTML templates, see [Chapter 12, "Providing a Standard Look and Feel"](#).

- Apply the HTML template to your portal pages.

For information on applying HTML templates, see [Chapter 12, "Providing a Standard Look and Feel"](#).

11.13 Troubleshooting Styles

When I create a page, I am not given the option to select a style for the page.

If the page is based on a Portal Template that does not allow privileged users to choose their own page style, the style selection screen does not display when you create a page, and the Style tab does not display when you edit a page. If you have sufficient access to the template, you can edit the template and select **Enable Pages To Use Different Style** on the Style tab of template properties. Once this setting is selected, the Style tab displays in page properties.

Another possibility is that the page group that owns the page is not configured to allow privileged users to manage a page style. This option is available on the Main tab of page group properties. It must be selected for users to select a style for any pages in the page group.

How do I control the appearance of hyperlinks in, for example, text items?

The *Plain* and *<None>* selections provide the same effect for most item types. However, when applied to items displayed as hyperlinks, they behave differently:

- When *None* is applied to a hyperlink, the way the hyperlink is displayed is determined by a user's browser settings. That is, it displays as either plain or underlined according to how the user's browser is configured.
- When *Plain* is applied to a hyperlink, the hyperlink is always displayed as Plain (not underlined), no matter what the settings in the user's browser.

When I logged in today, all the colors and fonts were changed on my page.

If the page is based on a template, it probably uses the template's style selection. Whenever a template's style selection is changed, all the styles on all the pages that are based on the template also change.

This is true unless the template allows pages based on it to use their own style. In such cases, changes to the template style selection do not affect pages that are based on the template.

I cannot apply styles to my regions; the Styles tab does not display on the Edit Region page.

Is the region a portlet region? Portlet regions cannot have their own style.

It might also be privilege-related. It is not enough to have the page privilege *Manage*, the page group option **Allow Privileged Users to Manage Styles** must also be selected for you to be able to change region styles. Ask your page group or portal administrator either to select this option for the page group, or to grant you a higher level of privilege, for example, the page group privilege *Manage Styles*.

My page portlet is using the style of the target page rather than the style of its source page, as I have specified.

Page portlets always take their header and border colors from the page on which they are placed. This is because the display of headers and borders is controlled at the region level, rather than from any values set for the source page's style.

One way around this is to edit the region in which the page portlet is placed and turn off the display of portlet headers and borders. If the page portlet contains its own portlets, you must also turn off the display of headers and borders for regions on the page portlet's source page.

For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

Portlet background colors usually are specified by the style that is applied to the page on which the portlets are placed. With a page portlet, there is a way to display the source page's background color. Edit the style that is applied to the page on which the page portlet is placed (the target page). For the style element Portlet Body Color, remove the value from the Background Color field, and click Apply. The background color specified for the page portlet's source page (that is, Background Color property of the Common style element) displays.

To illustrate this for yourself, create a page named *Source* and a page named *Target*. Create a *Source Style* for the Source page and a *Target Style* for the Target page. Set all the color values for Source Style to the red end of the color palette. Set all the color values for Target Style to the blue end of the color palette.

Tip: When you edit styles, a quick way to move from style element property to style element property is to click the style element property in the Preview section of the Edit Style page. This selects the style element property and displays all of its values for editing

Add some portlets and items to the Source and Target pages. Publish the Source page as a portlet. Place the Source page portlet onto the Target page.

For the Source page, experiment with selecting and de-selecting **Use Style Of Page On Which Portlet Is Placed**, and viewing the result on the Target page. Also, experiment with specifying and clearing the value field for the **Background** property of Target Style's **Common** style element.

My page portlet is not using the style of the container page, as I specified.

When you publish a page as a portlet, you are given the opportunity to use the source page's style or to use the style of the containing page. Using the style of the containing page works in most cases. The exception is when the source page is provided through the Federated Portal Adapter. In such cases, the setting to use the style of the containing page is ignored. The page portlet uses whatever style is applied to its source.

My style specifies a page background color, but no color displays.

When a page uses an HTML page skin template, the page background color is taken from the template and any background color specified in a defined style is ignored.

An exception to this is when the page skin uses a class generated by an Oracle Portal style. For example, you can place an Oracle Portal style element class in the <body> HTML tag: <BODY style="margin:0px" class="Bodyid2siteid0">. Should you change the style declaratively, through the Oracle Portal user interface, the change is reflected as well in the template that references the style class.

This enables you to change the Background Color of all pages that use the page skin through the declarative style. (For more information on Oracle Portal style element classes, see [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).)

My portlet/tab corners are not rounded.

Check the applied style's Common style element, specifically check the hexadecimal value entered for the Background property's Background Color attribute. If you enter a hexadecimal color value that does not also appear in the color palette, tabs and portlets do not display with rounded corners.

I have applied my own CSS to my pages through an HTML template, and my results are very uneven.

It could be that the HTML template not only calls the CSS but also includes the #page.style# HTML template substitution tag. Or the template header includes Oracle Portal style element classes between <style></style> tags as well as the #page.style# tag.

If either of these is the case, consider removing the #page.style# tag. This tag calls the Oracle Portal style, which may include the same style element classes specified in the CSS or embedded between the <style></style> tags. This causes conflict, with the portal doing its best to figure out which style element class specifications to use.

It might also be that you have not applied the Main style to all relevant pages. If so, then the variable values associated with some of the style element classes (idnsiteidnm) do not match up with those of the Oracle Portal style selected for the page.

Go to all affected pages, and select the Main style. The Main style, which comes from the Shared Objects page group, always provides the variable values id1siteid0, making it predictable and thus allowing for consistent results.

My Page portlet/navigation page is using the background color of the container page, rather than the source page, as I prefer.

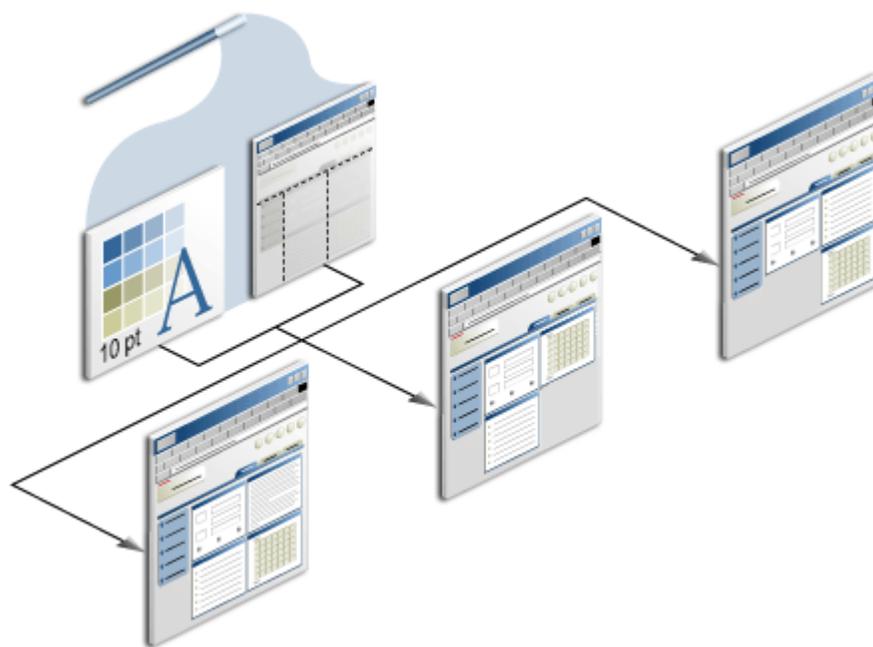
To ensure that a page portlet or navigation page uses its own background color, rather than the one specified for the page it is placed on:

1. Ensure that the page portlet or navigation page uses its own style when it is published as a portlet (that is, do not select this option for the page or navigation page that you are using as a portlet).
2. In the style that is used by the target page (that is, the page where you place the page portlet or navigation page), set Portlet Body Color style element to Null (no value).

Providing a Standard Look and Feel

In your organization, you may care to impose a standard layout, look, and feel on all of your portal pages. Although you will want to allow for variations, such as the addition of different kinds of content on different pages, you may want the overall look from page-to-page, region-to-region, portlet-to-portal, or item-to-item to remain precisely consistent. If this is the case, consider using templates.

Figure 12–1 Use Templates for a Standard Layout and Style



This chapter describes the template options offered in Oracle Portal and provides information on how to use them. It includes the following sections:

- [Section 12.1, "Understanding Templates in Oracle Portal"](#)
- [Section 12.2, "Working with Portal Templates for Pages and Items"](#)
- [Section 12.3, "Working with HTML Templates"](#)
- [Section 12.4, "Deleting Templates from Oracle Portal"](#)
- [Section 12.5, "Troubleshooting Templates"](#)

Oracle Portal provides several caching options to assist page designers and administrators with optimizing the performance of their portal pages, portlets, and

templates. To find out more about caching, see [Chapter 21, "Improving Page Performance"](#).

For information about specifying access rules for Portal Templates, see [Chapter 17, "Protecting Your Content"](#).

Intended Audience

This chapter is intended for users who will work with templates. Different types of privileges are required for different types of tasks. For example, the page group privilege *Manage Templates* enables a user to create a template. With *Manage Templates* alone, however, the user will not be able to access or view a page. Consequently, such a user must also have at least the page privilege *Manage* to apply a template.

12.1 Understanding Templates in Oracle Portal

A template is a tool for enforcing a standard layout and look and feel across multiple pages or within a region. When you change a template, all pages or regions that are based on that template are automatically changed as well. Templates provide additional standardization controls, depending on the type you use.

In Oracle Portal, you can create two types of templates:

- Portal Templates
- HTML Templates

These are described later in this chapter.

Templates can be used only within their page group, except for those contained in the Shared Objects page group. Templates in the Shared Objects page group can be applied across page groups.

Note: The default language of the Shared Objects page group is English. This can have implications particularly when you want to share a template over non-English page groups. Objects on a template in the Shared Objects page group that do not have an explicit translation in the relevant language will not display on the non-English pages that are based on the template. If you want those objects to display, first you must add translated versions of those objects to the template. For information on adding item translations, see [Section 19.3.1, "Adding a Translated Item"](#).

This section provides descriptions of these template types and lists the conditions governing their use. It includes the following subsections:

- [Section 12.1.1, "What Are Portal Templates?"](#)
- [Section 12.1.2, "What Are HTML Templates?"](#)
- [Section 12.1.3, "Comparing Template Types"](#)

12.1.1 What Are Portal Templates?

Portal Templates are templates you build declaratively by stepping through a template-building wizard. You can use Portal Templates to enforce specific layouts, colors, fonts, and backgrounds. You can extend Portal Templates using page parameters and events.

You can use Portal Templates in two ways: with pages and with items. This section provides a high-level overview of the benefits and uses of Portal Templates and a more detailed discussion of Portal Templates for pages and Portal Templates for items. It includes the following subsections:

- [Section 12.1.1.1, "Portal Template Uses and Benefits"](#)
- [Section 12.1.1.2, "Portal Templates for Pages"](#)
- [Section 12.1.1.3, "Portal Templates for Items"](#)

12.1.1.1 Portal Template Uses and Benefits

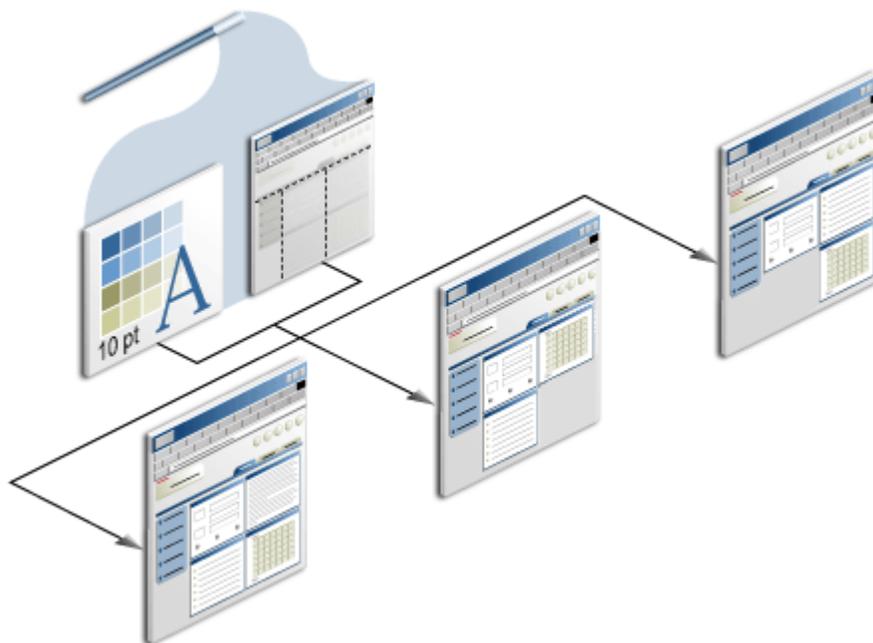
Portal Templates provide a simple, declarative means of defining templates to apply to pages and items. Use *Portal Templates for pages* on navigation pages, standard pages, and custom pages that are based on the standard page type. Use *Portal Templates for items* with Text items, PL/SQL items, URL items, and all File items of the type text/html or text/plain.

Portal Templates for pages enforce a standard appearance and page layout. Portal Templates for items display item content within the context of a template and, working in concert with parameters, show template portlets in a master/detail relationship with the item currently displayed.

Portal Templates for items use the *Item Placeholder* item type to stand in for item content. Users access an item's URL, and the item renders within the context of the template, in the location formerly held by the Item Placeholder. Portal Templates for items can be applied at either the page or item level (see [Section 12.2.2, "Using Portal Templates with Items"](#)).

12.1.1.2 Portal Templates for Pages

You can use Portal Templates for pages to enforce a particular layout, style, set of privileges, and content across multiple pages. As with a standard page, you can divide a Portal Template for pages into regions and tabs, apply a style to the template, grant access privileges, and add items and portlets. Additionally, you can define parameters for the template and use them in conjunction with the portlets placed on the pages that are based on the template.

Figure 12–2 Portal Templates for Pages

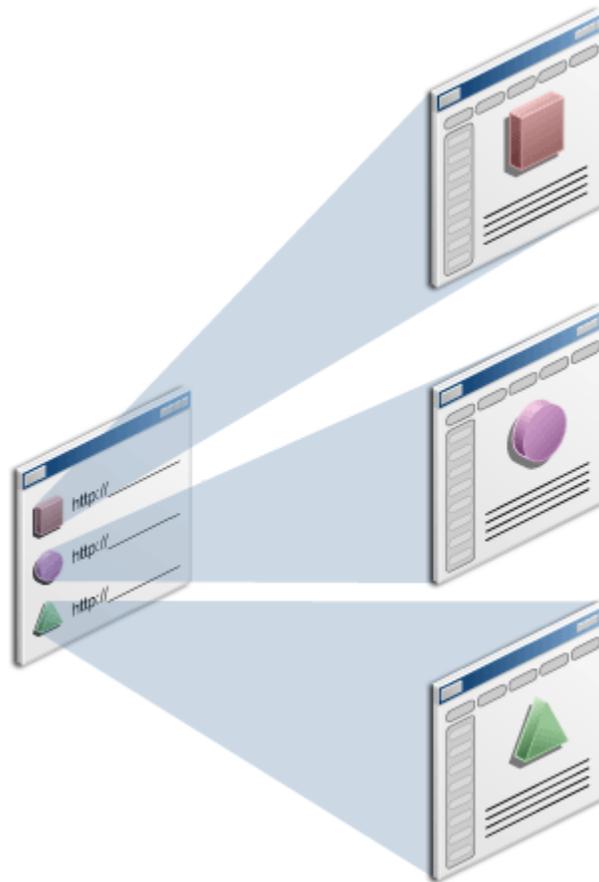
Any page that uses the template includes all the items, portlets, privileges, and parameters included in the template. An update to the template results in an instant and automatic update to all pages that are based on the template.

Template builders have the option of allowing template users to specify their own access rules or select their own styles. When templates allow users to select their own access rules or styles, updates to these properties on the template do not affect the pages that are based on the template.

For information on creating, applying, editing, or detaching a Portal Template for pages, see [Section 12.2, "Working with Portal Templates for Pages and Items"](#).

12.1.1.3 Portal Templates for Items

You can use Portal Templates for items to enforce a particular layout, style, and associated content. With Portal Templates for items, a requested item displays within the layout defined by the template rather than in place on the item's container page. For example, when a link to an item displays on the item's container page, users click the link, and the item content displays within the context of its associated Portal Template. The item's content is displayed in place of the item placeholder on the template ([Figure 12–3](#)).

Figure 12-3 Portal Templates for Items

You can use Portal Templates for items with Text items, PL/SQL items, URL items, and all File items of the type text/html or text/plain.

Portal Templates for items are built with the same wizard that is used for creating Portal Templates for pages. The main difference between these template types is that templates for items are used in conjunction with the *Item Placeholder* item type, while templates for pages are not. Once an item placeholder is added to a Portal Template, the Portal Template becomes a Portal Template for items and is available for use only with items. Another difference is the security model that applies to each template type. For more information, see [Section 17.11, "Granting Privileges on Portal Templates"](#).

When an item is requested through its URL, Portal Templates for items dynamically place the requested item's content where the item placeholder is located on the template. Portal Templates for items cannot be used as page templates. Once the item placeholder is added to a Portal Template, the template no longer displays on any template pick lists used to apply templates to pages.

The item placeholder reserves a position within the template layout. As items are requested, that position is filled with their content. You can select a default item to temporarily stand in for the content that will populate the reserved position. You may wish to select a default item for the item placeholder to ensure that relevant content is seen if the Portal Template for items is called directly, through its URL.

Users switching between tabs on a page assembled from a Portal Template for items may lose the context of the originally-requested item. In such cases, users are likely to see the default (placeholder) item in lieu of the item that originally invoked the

template. One way to circumvent confusing, though logical, situations like this is to keep item templates as simple as possible, with minimal in-page navigation, such as with few if any tabs and sub-tabs.

You can define parameters in a Portal Template for items and use them to communicate with any portlets that are included on the template.

You can apply access controls to Portal Templates for items that secure the entire template, template tabs, and template items. For more information, see [Section 17.11, "Granting Privileges on Portal Templates"](#)

For information on creating, applying, editing, or detaching a Portal Template for items, see [Section 12.2.2, "Using Portal Templates with Items"](#).

12.1.2 What Are HTML Templates?

HTML Templates are templates you build using your own HTML code. You can build HTML to wrap around page content or to format region content. Create HTML Templates using a simple Oracle Portal wizard.

Any valid HTML code can be placed in an HTML template. This includes JavaScript, Macromedia Flash, and the like. Additionally Oracle Portal provides HTML template substitution tags, which you can use to include Oracle Portal content in the template. For more information on HTML substitution tags, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

HTML Templates include two subtypes: HTML Page Skins and HTML Content Layouts. This section describes these template types and explores their potential uses. It includes the following subsections:

- [Section 12.1.2.1, "HTML Template Uses and Benefits"](#)
- [Section 12.1.2.2, "HTML Page Skins"](#)
- [Section 12.1.2.3, "HTML Content Layouts"](#)

12.1.2.1 HTML Template Uses and Benefits

HTML templates give you more control over HTML for your pages. Use them for page and page portlet decoration, for wrapping pages and page portlets in HTML or any other standard Web mark-up, and for laying out and formatting item links in concert with their item attributes.

HTML page skins render around the outside borders of a page. They can be applied to both pages and Portal Templates. For example, you can apply an HTML page skin to a Portal Template, then apply the Portal Template to a page. Because pages allow the application of only one page-level template, applying an HTML page skin to a Portal Template, then applying the Portal Template to a page is a way to enable a page to use an HTML page skin and a Portal Template at the same time.

The page skins you apply to a page also display when the page is exposed as a portlet. The template wraps around the portlet, giving the appearance of a region *skin*. You can use an HTML content layout template to achieve the same effect.

Page skins use page-level substitution tags to stand in for standard page elements, such as the page title, the currently logged in user, seeded site links, and the like. Substitution tags generate the HTML to render information stored in the Portal Repository. Additionally, you can use `<oracle></oracle>` tags to introduce PL/SQL elements, such as conditional statements, into your template. For more information on HTML page skin substitution tags, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

At the region level, choose between selecting specific attributes for display and rendering region content with an HTML content layout template. With HTML content layouts, the HTML you create repeats for every item in a region. For example, create an HTML content layout with a two-column structure, that exposes item content (in the form of a link to the item) in one column and its Create Date, Description, and Author attributes in the other column. Enter the HTML for this once in the HTML content layout template. Apply the template to a region with three items. All three items display according to the template's HTML (Figure 12-4).

Figure 12-4 Region with an HTML Content Layout

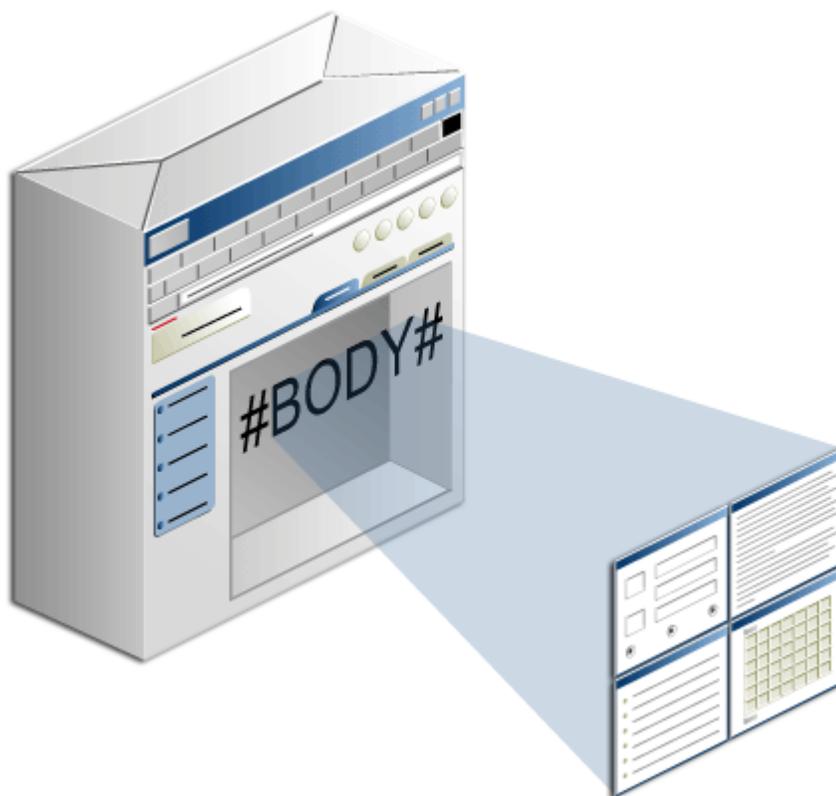


HTML content layouts use item-level substitution tags for label, value, and style, allowing you full control of your HTML. Additionally, with HTML content layouts you can use `<oracle></oracle>` tags to introduce PL/SQL elements, such as conditional statements, into your template.

Note: HTML content layouts apply only to content item types, not to navigation item types. For example, the HTML content layout selected for a region will be applied to text items in the region, but not to list of objects items.

12.1.2.2 HTML Page Skins

Use HTML page skins to define the appearance of the area surrounding page content. You can use HTML tables to make the page skin display content on all four sides of the page. You can add images, text, HTML formatting, JavaScript, and any other typical mark up or object type you could place on any other Web page.

Figure 12–5 HTML Page Skin

With HTML page skins, you define where the body area of the page will be. The body area is where page content will display.

You can introduce Oracle Portal elements into your page skin through the use of HTML page skin substitution tags. Use these to introduce such elements as page Edit or Personalize links, the name of the currently logged-in user, the current page's display name, and so on. For a list of HTML page skin substitution tags, including descriptions and examples, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

You can also use `<oracle></oracle>` tags to introduce PL/SQL elements, such as conditional statements, into your template.

Create an HTML page skin using an Oracle Portal wizard. You can use a third-party HTML editor to create the template HTML, then simply cut and paste your result into the wizard's HTML code field.

For information about creating, applying, editing, or detaching an HTML page skin, see [Section 12.3.1, "Using HTML to Define a Page Border"](#).

12.1.2.3 HTML Content Layouts

Use HTML content layouts to define a formatting scheme for content within a particular region. Design HTML content layouts for use with item regions, portlet regions, or both. Use HTML to create tables, font designs, colors, and any other mark up or object type you could place in any other HTML template. You can even call a cascading style sheet (CSS) to apply a standard format that you use in other forms of company documentation.

Note: The HTML content layout repeats itself for each portlet or item in the region. Consider carefully before using a CSS in the content layout. The CSS is repeated as many times as the number of items in the region.

For additional information on Oracle Portal and cascading style sheets, see [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).

Figure 12–6 HTML Content Layout



Use HTML content layout substitution tags to introduce Oracle Portal elements, such as display names, descriptions, categories, perspectives, and so on. For a list of HTML content layout substitution tags, including descriptions and examples, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

You can also use `<oracle></oracle>` tags to introduce PL/SQL elements, such as conditional statements, into your template.

Create your HTML content layout using the Oracle Portal wizard. You can use a third-party HTML editor to create the template HTML, then simply cut and paste your result into the wizard's HTML code field.

For information on creating, applying, editing, or detaching an HTML content layout, see [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#).

12.1.3 Comparing Template Types

Table 12–1 provides a concise description of where in the Oracle Portal user interface you can apply each type of template and a brief summary of the conditions governing the use of each type.

Table 12–1 Comparison of Template Types

Type	Where to Apply	Conditions Governing Use
Portal Templates for Pages	<ul style="list-style-type: none"> ■ Select a default template for the <i>page group</i> on the Configure tab of <i>page group</i> properties. ■ Select a template for a <i>page</i> on the Template tab of <i>page</i> properties. 	<p>The default template you select at the page group level is applied to sub-pages in the page group only if page designers do not explicitly select a template when they create pages. Additionally, the page group setting Use Default Properties When Creating Page (on the Configure tab of page group properties, under Page Defaults) must be selected. If it is not selected, sub-pages inherit whatever template is specified for the parent page's page properties, rather than from page group properties).</p> <p>Use Portal Templates for pages on navigation pages, standard pages, or custom page types that are based on the standard page type.</p>
Portal Templates for Items	Select a Portal Template for items on the Items tab of <i>page</i> properties (but see <i>Conditions Governing Use</i>).	<ul style="list-style-type: none"> ■ For this feature to be available, a Portal Template for items must be defined for the page group that owns the current page or for the Shared Objects page group. ■ For the template to be a Portal Template for items, it must contain an item placeholder-type item. ■ Default content for the item placeholder can be a file or a text item type. Files can contain either text or HTML.
HTML Page Skins	<ul style="list-style-type: none"> ■ Select a default template for the <i>page group</i> on the Configure tab of <i>page group</i> properties. ■ Select an HTML Page Skin for a page on the Template tab of <i>page</i> properties 	The option to use a page skin is selectable on a page's Template tab only when at least one page skin is defined in the page group or the Shared Objects page group.
HTML Content Layouts	<p>To select an HTML Content Layout:</p> <ol style="list-style-type: none"> 1. Edit a portlet or item region. 2. Go to the Attributes tab. 3. Select the Use HTML Content Layout radio button. 4. Select a content layout template. 	The option to use a content layout is selectable on the Attributes tab only when at least one content layout is defined in the page group or the Shared Objects page group.

Note: When a page group and the Shared Objects page group both have a template of the same name, the page group name is added to the template name in pick lists. For example: `<template_name>(page_group_name)`. This assists in distinguishing between templates on pick lists.

12.2 Working with Portal Templates for Pages and Items

Use Portal Templates for pages and Portal Templates for items when you want your pages to display consistent layout, font, color, and auxiliary content when viewing a page or an item.

This section provides information on using both types of Portal Templates. It includes the following subsections:

- [Section 12.2.1, "Using Portal Templates with Pages"](#)
- [Section 12.2.2, "Using Portal Templates with Items"](#)
- [Section 12.2.3, "Copying a Portal Template"](#)
- [Section 12.2.4, "Editing Portal Template Properties"](#)

12.2.1 Using Portal Templates with Pages

Portal Templates for pages enable you to enforce a standard look and feel on your portal pages. Keep in mind that a Portal Template for pages is rigorous in enforcing the layout, look, and feel it provides. For example, in most cases, you cannot add new regions to pages that are based on Portal Templates. Be sure the template contains the regions your content providers will require.

There's one exception to the "no new regions" rule. If the template includes a tab, users with edit or personalization privileges on a page can add more tabs on pages that are based on the template. Then they can create additional regions on the new tabs.

Additionally, you can allow or prevent privileged users from applying a page style other than the one provided by the template. You can lock template regions to prevent anyone from adding content to those regions. And you can allow or prevent privileged users from defining page access rules other than those defined for the template.

Use Portal Templates for pages on navigation pages, standard pages, or custom page types that are based on the standard page type.

This section provides information on how to create, apply, edit, and detach Portal Templates for pages. It includes the following subsections:

- [Section 12.2.1.1, "Creating a Portal Template for Pages"](#)
- [Section 12.2.1.2, "Applying Portal Templates for Pages"](#)
- [Section 12.2.1.3, "Editing Portal Templates for Pages"](#)
- [Section 12.2.1.4, "Detaching a Portal Template from a Page"](#)

12.2.1.1 Creating a Portal Template for Pages

There are two methods for creating a Portal Template for pages:

- [Section 12.2.1.1.1, "Creating a Portal Template for Pages Using a Wizard"](#)
- [Section 12.2.1.1.2, "Converting a Page to a Portal Template"](#)

12.2.1.1.1 Creating a Portal Template for Pages Using a Wizard The template creation wizard provides an easy-to-use interface for defining the underlying structure of your Portal Template. Use the template creation wizard to:

- Specify whether the template should be available immediately or remain unpublished until it is complete

- Select the style that will define its colors, fonts, and background images
- Specify access rules that will define which users can access the pages that are based on the template

During the process of creating a template, you are given the opportunity to select a navigation page banner for the top of your template and a style to specify the fonts, colors, and background image to apply to the template. Before you create a template, the navigation page and style you plan to use should already be created and available for selection. For information on defining a style, see [Chapter 11, "Working with Colors and Fonts"](#). For information on creating a navigation page, see [Chapter 13, "Designing Your Portal's Navigation"](#).

You can use Portal Templates for pages on navigation pages, standard pages, or custom page types that are based on the standard page type.

To create a Portal Template with the template creation wizard:

Note: In the Oracle Portal user interface, fields that require a value are marked with an asterisk (*).

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page to own the template.

The default location of the Page Groups portlet is on the Build tab of the Portal Builder page. If you plan to use this template across multiple page groups, select the Shared Objects page group. Templates in the Shared Objects page group can be shared across page groups. Templates in any other page group can be used only within their page group.

4. In the Layout & Appearance section, click the **Create** link next to the **Portal Templates** heading.

This opens the template creation wizard.

5. In the **Display Name** field, enter a Display Name for the template.

Use up to 256 characters of any kind. The Display Name identifies the template in the Page Groups portlet, the Portal Navigator, and the various template pick lists.

6. Select **Make available for use in this page group** if you want the template to be immediately available for use in its page group.

Selecting this option adds this template's display name to the Portal Template pick list on the Template tab in page properties. Users with a sufficient privilege level on the page will be able to see and select this template.

Consider clearing this check box while you develop the template to prevent other users from selecting it until it is complete. The template name displays in the Page Groups portlet so that you can continue to access it easily to continue its development. But it does not appear on the template pick list on the page properties Template tab. Consequently, it cannot be applied to a page.

Note: Selecting this check box also allows all users to view the template. However it does not affect the security of pages based on the template.

7. Select a banner from the **Navigation Page For Banner** drop-down list.

If you will not use any of the banners that are available on this list, select **<None>**. This list includes all the navigation pages in this page group and the Shared Objects page group.

8. Click **Create**.

The template displays in Edit mode. Create regions, add content, and complete the construction of the template. For information on working with regions, see [Chapter 10, "Working with Layouts"](#). For information about adding content, see [Chapter 14, "Working with Items"](#) and [Chapter 15, "Working with Portlets"](#).

9. When you create a new Portal Template, various properties, such as style and access settings, are defaulted to make the creation process quicker. After you have created your template you may want to edit the properties of the template to change some of these default settings.

Note: For information on editing properties of Portal Templates for pages, see [Section 12.2.1.3, "Editing Portal Templates for Pages."](#)

The default language of the Shared Objects page group is English. This can have implications particularly when you want to share a template over non-English page groups. Objects on a template that belongs to the Shared Objects page group that do not have an explicit translation in the relevant language will not display on the non-English pages that are based on the template. If you want those objects to display, first you must add translated versions of those objects to the template. For more information, see [Chapter 19, "Translating Portal Content"](#).

12.2.1.1.2 Converting a Page to a Portal Template You can use an existing standard page as the starting point for a new template. When you convert a page to a template, a copy of the page is created. The copy becomes the new template. The original page still exists, and is not affected by the conversion.

Only pages that are not based on a template can be converted to templates.

When you convert a page to a template, almost everything associated with the page is converted, but a few things are not. The attribute values, option selections, and objects that are not converted from the source page include:

- Caching options
- Contact E-Mail
- Category
- Perspectives
- Keywords
- Default WebDAV Types
- Portal Template for items assignment
- Custom page attributes
- Page Images
- Approval routing
- Sub-pages
- Page function items

To convert a page to a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to be converted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under Layout & Appearance, click the **Browse** link next to the **Pages** heading.
5. On the resulting Portal Navigator page, click the **Convert to Template** link next to the page you will convert.

Note: If you want to create a template from the page group's root page, click **Convert Root Page to Template** next to the page group in the Portal Navigator.

6. In the confirmation screen, click **Yes** to convert the page to a Portal Template.

You are returned to the Portal Navigator where the original page remains intact. A copy of the page is created under the Portal Templates node in the Portal Navigator. A link to it also displays under the Portal Templates heading in the Page Groups portlet. Click this link to edit the template.

7. Optionally, click the **Builder** link at the top of the page to return to the Portal Builder page.

12.2.1.2 Applying Portal Templates for Pages

You can apply Portal Templates for pages to navigation pages, standard pages, or custom page types that are based on the standard page type.

To apply a Portal Template for pages:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. In the Page Groups portlet, select the page group that owns the page to which you will apply a Portal Template from the **Work In** drop-down list.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page to which you will apply a template.

This opens the page in Edit mode.

5. In the toolbar at the top of the page, click the **Page: Properties** link.
6. On the resulting page, click the **Template** tab to bring it forward.
7. Select the **Use Portal Template** radio button, and select the Portal Template you will use from the Portal Template drop-down list.

When a page group and the Shared Objects page group both have a template of the same name, the page group name is added to the template name in pick lists. For example: <template_name> (page_group_name). This assists in distinguishing between templates on pick lists.

8. If the page contains content, a **Region Mapping** section displays.

In this section, specify where you want to move content from the original page regions into the new, template-provided regions. The regions are represented either by automatically-assigned identification numbers or by their user-assigned region names.

9. Click **OK** to save your changes and open the page in Edit mode.

12.2.1.3 Editing Portal Templates for Pages

To edit a Portal Template for pages:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the template to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Portal Templates** heading, click the link to the relevant template.

This opens the template in Edit mode.

5. Make your changes, and click the **View Template** link in the toolbar at the top of the page to view your results.
6. To edit the properties of the template, click the **Template: Properties** link in the toolbar at the top of the page.
7. Move from tab to tab, and edit properties as desired:
 - **Main**—Change the name or display name of the template; add a description; or change whether or not the template can be used by pages in the page group. For information about the naming rules that apply to Portal Templates, see [Appendix D, "Object Naming Rules in Oracle Portal."](#)
 - **Style**—Select a style to define the colors and fonts to use for pages *based on* the template.

A Portal Template can enforce the style of a page. Clear **Enable Pages To Use Different Style** if you want users to have no choice about what style to use. Pages that are based on the template will always use the style you choose here and the Style tab will not be displayed in the page properties tab set. Users will be prevented from selecting a different style, even for their own version of the page. That is, when a page is being personalized, the Style tab will not display. Select this check box to enable users with sufficient privileges to apply a different style to pages that are based on the template.

This setting works in conjunction with the Page Group properties **Allow Privileged Users to Manage Page Style** and **Allow Privileged Users to Personalize Page Style**. For more information, see [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#).

Note: When you base a page on the template, it will initially use the template's style. The page will continue to use the template's style even when you enable pages based on the template to have their own style selections. Every time you update the style for the template, the style for the pages based on the template will also be updated. This relationship continues until you select a different style for the page.

- **Access**—Define who can access pages *based on* the template and what level of control they have over those pages.

A Portal Template can also enforce access for a page. Clear **Enable Pages to Have Different Access** to prevent users from choosing different access control settings when they create or edit pages that are based on this template. Such pages will always use the template access control settings and the Access tab will not be displayed in the page properties tab set. Select this check box to enable users to choose different access control settings.

Note: For more information on security features in Oracle Portal, see [Chapter 17, "Protecting Your Content"](#).

- **Items**—Specify the item versioning level and default region for placing content.
- **Optional**—Select an HTML page skin. For more information, see [Section 12.1.2, "What Are HTML Templates?."](#)
- **Parameters**—Set up page parameters. For more information, see [Chapter 22, "Using Parameters and Events."](#)
- **Events**—Set up page events. For more information, see [Chapter 22, "Using Parameters and Events."](#)

8. Click the **OK** when you are done.

When you edit a page that is based on the template, you can also click the **Edit Template** link in the toolbar at the top of the page to enter Template Edit mode.

12.2.1.4 Detaching a Portal Template from a Page

If you will no longer use a Portal Template for a particular page, you can detach the template from the page. When you detach a Portal Template from a page, the page retains the same layout and content that was provided by the template, but the page now owns it. Any changes made to the template no longer affect the page. If you have a sufficient level of privilege, you will now be able to change the layout of the page and add content to any region.

To detach a Portal Template from a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page from which to detach a template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page from which to detach a Portal Template.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Template** tab to bring it forward.
7. Click the **Detach from Template** link next to the **Use Portal Template** field.

Note: If you do not see the Detach from Template link, the page does not use a template.

8. In the confirmation page, click **Yes** to detach the template.
9. Click **OK** to return to the page.

12.2.2 Using Portal Templates with Items

You can use Portal Templates for items to control the appearance of items—including supporting content and decoration—when they are accessed through a URL. For example, render item content while maintaining the context of your portal's look and feel. Use Portal Templates for items with Text items, PL/SQL items, URL items, and File items of type text/html or text/plain.

Any access rules you define for a Portal Template for items are preserved. When an unauthorized user tries to access an item in the context of a template, an error message is rendered.

Users can view an item within the context of its template when one of the following conditions is met:

- The template is public.
- The user has at least the *View* privilege on the template.
- The user has *Manage Template* privilege on the page group.

This section describes how to create, apply, edit, and detach from a Portal Template for items. It contains the following subsections:

- [Section 12.2.2.1, "Creating Portal Templates for Items"](#)
- [Section 12.2.2.2, "Applying Portal Templates for Items"](#)
- [Section 12.2.2.3, "Calling a Portal Template for Items at Runtime"](#)
- [Section 12.2.2.4, "Editing Portal Templates for Items"](#)
- [Section 12.2.2.5, "Detaching a Portal Template for Items"](#)

For information on parameter passing and Portal Templates for items, see [Section 22.6.1, "Defining Parameter Values for Items Displayed on a Portal Template"](#). For information on securing Portal Templates for items, see [Section 17.11, "Granting Privileges on Portal Templates"](#).

12.2.2.1 Creating Portal Templates for Items

Portal Templates for items enable page designers to create a template that defines layout, font, color, and auxiliary content in addition to a placeholder that is replaced dynamically with the content of the requested item. You can select default content for the item placeholder to display in the event that the target content should lose its

context, such as when a user navigates away from the item content, then navigates back to it.

When users click a tab on a Portal Template for items, the tab URL displaces the item URL and item content is not preserved. This means that users switching between tabs on a page assembled from an item template, may lose the context of the item whose URL rendered the item template. In such a case, users are likely to see the default (placeholder) item in lieu of the item that originally invoked the template. One way to circumvent confusing, though logical, situations like this is to keep item templates as simple as possible, with minimal in-page navigation. That is, with few if any tabs and sub-tabs.

Whenever you place an item placeholder on a Portal Template, it becomes a Portal Template for items. This is true even when the item placeholder is in a non-active state, such as *Draft*, *Pending*, *Rejected*, *Hidden*, *Expired*, and so on. Note, however, that when the item placeholder is not in an active state, its default content or the content that replaces it when an item is rendered does not display.

Note: Items on the template itself are not selectable as default content for an item placeholder.

When items of the type *URL* with Display Options set to **Item Displayed Directly In Page Area** are rendered with Portal Templates for items, the item cannot point to a URL that requires HTTP authentication. Such items rendered as links have no such restriction.

To create a Portal Template for items:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page. If you plan to use the template across page groups, select the Shared Objects page group.

4. In the Layout & Appearance section, click the **Create** link next to the **Portal Templates** heading.
5. Enter a display name in the **Display Name** field.

Use any character, including spaces.

For information on object naming rules in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

Note: In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

6. Check the **Make available for use in this page group** check box if you want users to be able to apply this template now.

Consider leaving this check box blank until you have completed creating the template. Once this option is selected, the template displays on the relevant template pick lists. For example, if this check box is selected, once the template

contains an item placeholder, it will be listed and available for selection on the Items tab of page properties.

No matter whether this option is selected, an item template is always listed and available under the Portal Templates heading in the Page Groups portlet.

Note: Selecting this check box also allows all users to view the template. However it does not affect the security of pages based on the template.

7. Select a navigation banner to display at the top of the page from the **Navigation Page For Banner** drop-down list.

Select **<None>** to forgo selecting a banner.

8. Click **Create**.

The template opens in Edit mode.

9. Build the template.

This consists of designing a layout with regions and adding whatever images and other content you plan to include on the template. For more information on working with page regions, see [Chapter 10, "Working with Layouts"](#). For more information about adding different types of content, see [Chapter 14, "Working with Items"](#) and [Chapter 15, "Working with Portlets"](#).

10. In at least one of the item regions, add an item placeholder:

- a. Click the **Add Item** icon over the region that will contain the item placeholder.

- b. From the **Content Item Types** drop-down list, select **Item Placeholder**.

If the Item Placeholder item type does not appear on this list, click the link **configure the list of available item types**, and add Item Placeholder to the list of available item types. If you do not see this link, ask your page group administrator to add this item type to the page group's list of available item types. For information on making different item types available to a page group, see [Section 5.2.2.3, "Making an Item Type Available to a Page Group"](#).

- c. Click **Next**.

- d. Click the **Choose Item** icon to browse to a list of available content.

Choose from all the available items that are uploaded to your portal. The only item you cannot choose is one that is already placed on the template.

Once a Portal Template contains an item placeholder, it becomes a Portal Template for items and appears on the item template pick list on the Items tab of page properties.

11. When you create a new Portal Template, various properties, such as style and access settings, are defaulted to make the creation process quicker. After you have created your template you may want to edit the properties of the template to change some of these default settings.

Note: For information about editing the properties of Portal Templates for items, see [Section 12.2.2.4, "Editing Portal Templates for Items."](#)

12.2.2.2 Applying Portal Templates for Items

Portal Templates for items can be selected at the page level and the item level. At the page level, the Portal Template is selected on the Items tab of page properties. At the item level, the Portal Template is selected on the Edit Item screen. For a template to be selectable on the Edit Item screen, page properties must specify that users can select a template other than that specified at the page level.

This section describes how to apply a Portal Template for items at the page level and at the item level. It contains the following subsections:

- [Section 12.2.2.2.1, "Applying a Portal Template for Items at the Page Level"](#)
- [Section 12.2.2.2.2, "Applying a Portal Template for Items at the Item Level"](#)

12.2.2.2.1 Applying a Portal Template for Items at the Page Level To apply a Portal Template for items:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to apply the item template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page on which to apply the item template.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Items** tab to bring it forward.
7. Select the **Use this portal template** radio button, then select a template from the associated drop-down list.

When a page group and the Shared Objects page group both have a template of the same name, the page group name is added to the template name in pick lists. For example: <template_name> (page_group_name). This assists in distinguishing between templates on pick lists.

8. Optionally, select the **Allow items on this page to use a different Portal Template** check box.

Selecting this option enables users to choose a different template when they edit an item on this page.

9. Click **OK** to save the change and return to the page in Edit mode.

Alternatively, click **Apply** to save the change but remain on the Items tab.

When users click a link to an item on this page, the item content will display within the context of the selected template.

When property inheritance rules (set at the page group level) are set to copy property settings from the parent page, all sub-pages of a page where you apply an item template also inherit the parent page's item template setting. Subsequent changes to the template setting cascade to sub-pages.

The option **Allow items on this page to use a different Portal Template** is exempted from this behavior. When changes to item template settings on the parent page

cascade to sub-pages, any change to the **Allow items on this page to use a different Portal Template** setting do not also cascade.

12.2.2.2.2 Applying a Portal Template for Items at the Item Level For users to be able to apply a Portal Template for items at the item level, the option **Allow items on this page to use a different Portal Template** must be selected on the page properties Items tab.

Apply a Portal Template for items at the item level when you want to use a template other than the one specified at the page level.

Note: The option to apply a template at the item level is available only for items of one of the following types: Text, PL/SQL, URL, and File items of the type text/html or text/plain.

To apply a Portal Template for items at the item level:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to apply the item template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page on which to apply the item template.

This opens the page in Edit mode.

5. Go to the page to which you have applied a Portal Template for items, and edit an item.

For information on editing an item, see [Chapter 14, "Working with Items"](#).

Note: The option to select a Portal Template for items on a specific item is available only when you edit an item and not when you add an item.

6. Select **Use this portal template**, then choose a template from the drop-down list.
7. Click **OK**.

12.2.2.3 Calling a Portal Template for Items at Runtime

Sometimes you may need to display an item within the context of a template that is different from the one defined in your portal's properties. An example of this is viewing an item in a printer-friendly format.

Many businesses offer a printer-friendly option for their published content. Users reading an item can click a link that takes them to the same item without display ads or other unrelated content. You can achieve this effect by specifying a printer-friendly template on the item URL, thus calling the template at runtime.

A call to override the default Portal Template for items in a path-based URL takes the following syntax:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/
```

```
<page_path>/<item_name>?_template=/<page group name>/<template name>
```

A call to override the default Portal Template for items in a durable URL takes the following syntax:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/
<item_guid>?_template=/<page group name>/<template name>
```

Note: Before either call can work, the Printer Friendly template must already be created.

The template name to call is the Name specified when the template was created. This is in contrast to the template's Display Name.

You can create a Portal Template for items that includes a link to a printer-friendly version of the item using one of these URL formats in conjunction with two Item Placeholder items, each in its own region, two Portal Templates for items, and two HTML content layout templates.

When you place two Item Placeholders on the same template, they render the same item. Armed with this knowledge, you can create a Portal Template for items that includes a link to a printer-friendly version of the item—one that gives more real estate to the article and eliminates unnecessary additional content.

For example:

- Create a Portal Template for items, named *MainItem*.
- Create a second Portal Template for items, named *PrinterFriendly*. This is the template that will override the default item template currently selected in page or item properties.
- On the *MainItem* template, create at least two regions: one for the display of item content, the other for the display of a link to the printer-friendly version of the item. Add an Item Placeholder to each region.
- Create an HTML content layout template to render a link to the item (using the `#item.url#` substitution tag) and invoke the *PrinterFriendly* Portal Template for items (using the URL syntax demonstrated at the beginning of this section). For example:

```
<a href="#item.url#?_template=/mypg/PrinterFriendly">
 Printer Friendly
</a>
```

This code displays a printer icon with the label *Printer Friendly* (Figure 12–7).

Figure 12–7 Printer Icon and Label



The icon and text are enclosed in an HREF tag that references the displayed item's URL (`#item.url#`) and the *PrinterFriendly* Portal Template for items (`?_template=/mypg/PrinterFriendly`).

This reference works for all items because the `#item.url#` substitution tag renders the URL of the current item, whatever that may be.

- Apply the MainItem template to the page that contains the links to your articles. To apply the template, go to the Items tab of page properties.

When users request an item, the item's content is displayed within the context of the MainItem template. The MainItem template contains the Printer Friendly link to the requested item. When users click the Printer Friendly link, the same item is rendered, this time within the context of the PrinterFriendly template.

In this example, the PrinterFriendly template is called at runtime.

For additional information on the formation of URLs in Oracle Portal, see [Appendix C, "Formation of URLs in Oracle Portal"](#). For additional information on substitution tags, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#). For information on creating and applying HTML content layout templates, see [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#).

12.2.2.4 Editing Portal Templates for Items

To edit a Portal Template for items:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list select the page group that owns the Portal Template for items.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Portal Templates** heading, click the link to the template to be edited.

This opens the template in Edit mode.

5. Make your changes to the template. Once any cached versions of the template expire, all items that use the template will display the edited version. You can accelerate this process by going to the page's Access tab and clicking the **Clear Cache** link. For more information about templates and caching, see [Chapter 21, "Improving Page Performance"](#).
6. To edit the properties of the template, click the **Template: Properties** link in the toolbar at the top of the page.
7. Move from tab to tab, and edit properties as desired:

- **Main**—Change the name or display name of the template; add a description; select page caching options; and specify the page assembly timeout. For information about the naming rules that apply to Portal Templates, see [Appendix D, "Object Naming Rules in Oracle Portal."](#)

For information on template caching options, see [Chapter 21, "Improving Page Performance"](#).

- **Style**—Select a style for the template. Styles specify a page's colors and fonts. Click the **Preview** button and cycle through the **Portlets**, **Items**, **Tabs**, and **Common** radio buttons to preview the look and feel of a selected style. To learn more about styles, see [Chapter 11, "Working with Colors and Fonts"](#).

Note: The setting **Enable Pages To Use Different Style** has no effect on Portal Templates for items. The item template is rendered dynamically, on-the-fly, and consequently, there is no opportunity for other page designers to navigate to it (as they could a static page) to specify a different style.

- **Access**—Define access control settings. These have to do with pages and items. For more information about securing Portal Templates for items, see [Section 17.11, "Granting Privileges on Portal Templates"](#).
 - **Items**—Specify the item versioning level and default region for placing content.
 - **Optional**—Select an HTML page skin. For more information, see [Section 12.1.2, "What Are HTML Templates?."](#)
 - **Parameters**—Set up page parameters. For more information, see [Chapter 22, "Using Parameters and Events."](#)
 - **Events**—Set up page events. For more information, see [Chapter 22, "Using Parameters and Events."](#)
8. Click **OK** when you are done.

12.2.2.5 Detaching a Portal Template for Items

If you do not want items to display within the context of a Portal Template for items, you can detach the template from the page. Once the template is detached, the content that displays when users click item links will no longer display in the context of the template. In contrast to when you detach a Portal Template for pages, when you de-select a Portal Template for items no template objects are left behind. Item content displays in an otherwise blank browser window.

To detach a Portal Template for items:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page from which to detach the Portal Template for items.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page from which to detach the template.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Items** tab to bring it forward.
7. Select the **Do not use a portal template** radio button.
8. Click **OK**.

Once the cache that is storing the item content and the template expires, when users click a link to an item on this page, the item content will no longer display within the context of the detached template. You can accelerate this process by going to the page's Access tab and clicking the **Clear Cache** link. For more information about templates and caching, see [Chapter 21, "Improving Page Performance"](#).

12.2.3 Copying a Portal Template

Copying a Portal Template provides a quick way to create a new Portal Template based on an existing one with a similar layout and content. The copy is created in the same page group as the original.

Note: Content and any portlet personalizations are not copied for the Portal Templates that are generated automatically for categories and perspectives.

To copy a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Navigate to the root level of the Page Groups tab (**Path: Page Groups**).
4. Click the name of the page group that owns the template to be copied.
5. On the Page Group Objects page, click the Portal Templates node.
6. Click the **Copy** link next to the relevant template.
7. On the Copy Portal Template page, edit the template **Display Name**.

Use up to 256 characters of any kind. The Display Name identifies the Portal Template to other users. It is used in the Page Groups portlet, the Portal Navigator, and on template pick lists in the Oracle Portal user interface. The default value of the Display Name field is taken from the Display Name of the source template, with the words *Copy of* added.

8. Select or clear the **Copy Access Control** check box:
 - Select to copy access control from the source template.
 - Clear to forego copying the source template's access control settings.
9. Select or clear the **Copy Content** check box:

Note: This option is available for all Portal Templates except for those generated automatically for categories and perspectives.

- Select to copy the content of the source Portal Template. This includes the source template's items and portlets.
 - Clear to prevent the copy of the source template's content. Only the source's properties, including its style, and its region layout are copied.
10. Select or clear the **Copy Portlet Personalizations** check box:

Note: This option is available for all Portal Templates except for those generated automatically for categories and perspectives.

- Select to copy any personalizations that were made to the portlets on the source Portal Template.
 - Clear to reset the portlets on the copy to their default values.
11. Click **OK** to complete the copy.

12.2.4 Editing Portal Template Properties

Edit template properties to revise basic template attribute values, such as the template's Name, Display Name, and caching rules.

To edit a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, select the page group that owns the Portal Template to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Portal Templates** in the Layout & Appearance section, click the name of the template to be edited.

This opens the template in Edit mode.

Note: If the template is not included in those listed in the Page Groups portlet, click the **More...** link that displays at the end of the list.

5. Click the **Template: Properties** link in the toolbar at the top of the page.

This opens the Template Properties page, displaying the Main tab. The attributes available on the Main tab vary a little from the attributes available when you first create the page. Notably, the Main tab includes a **Name** attribute.

The Name attribute differs from the Display Name attribute both in the way Oracle Portal uses it and in the rules that govern which characters can be used in its formation. Oracle Portal uses the Name in the formation of path-based URLs.

Note: For information on the formation of URLs in Oracle Portal, see [Appendix C, "Formation of URLs in Oracle Portal"](#).

The default value in the Name field is taken from the Display Name provided when the template was created. The value is truncated to 60 characters and any characters that are invalid in this field are removed. Invalid characters include:

& # % \ / : * ? < > | , "

For example, if the **Display Name** is R&D Temp, the **Name** is RD Temp.

The Name is case sensitive. It must be unique within its page group. Use up to 60 characters of any kind, except those specified in the preceding paragraphs.

6. Move from tab to tab, and edit properties as desired.

For detailed information about template caching options, see [Chapter 21, "Improving Page Performance"](#).

Note: You will find the user interface for applying an HTML page skin template to the Portal Template on the Optional tab.

7. Click **OK** when you are done.

12.3 Working with HTML Templates

You can use your own HTML to create a template for a portal page and to define the format, style, and colors to be used in portlet and item regions. Create templates for pages with HTML page skins. Create templates for regions with HTML content layouts.

This section provides information on working with HTML templates in Oracle Portal. It includes the following subsections:

- [Section 12.3.1, "Using HTML to Define a Page Border"](#)
- [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#)
- [Section 12.3.3, "Using HTML to Create Templates for Database Portlets"](#)
- [Section 12.3.4, "Copying HTML Templates"](#)
- [Section 12.3.5, "Sharing an HTML Template Across Page Groups"](#)

12.3.1 Using HTML to Define a Page Border

Using a simple wizard, you can either enter or paste a copy of your own developed HTML to define the layout, look, and feel of a portal page. You can enrich the HTML by including substitution tags to stand in for standard elements that are available through the Oracle Portal user interface. You can also add any other Web standard mark up, such as JavaScript, to increase the dynamic capability of the template. *HTML page skins*, as these types of templates are known, affect the appearance of the area surrounding page content.

Note: When a page uses an HTML page skin template, the page background color is taken from the template and any background color specified in a defined style is ignored.

An exception to this is when the page skin uses a class generated by an Oracle Portal style. For example, you can place an Oracle Portal style element class in the <body> HTML tag: `<BODY style="margin:0px" class="Bodyid2siteid0">`. Should you change the style declaratively, through the Oracle Portal user interface, the change is reflected as well in the template that references the style class.

This enables you to change the Background Color of all pages that use the page skin through the declarative style. (For more information on Oracle Portal style element classes, see [Chapter 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).)

This section provides information about working with HTML to create page skins. It includes the following subsections:

- [Section 12.3.1.1, "Creating an HTML Page Skin"](#)
- [Section 12.3.1.2, "Applying an HTML Page Skin"](#)
- [Section 12.3.1.3, "Editing an HTML Page Skin"](#)
- [Section 12.3.1.4, "Detaching an HTML Page Skin from a Page"](#)

12.3.1.1 Creating an HTML Page Skin

Oracle Portal provides a simple wizard for creating an HTML template for a page. Enter HTML and any other tags that are valid within HTML, such as JavaScript, Oracle tags, HTML substitution tags, and the like.

For information on HTML page skin substitution tags, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

To create an HTML page skin template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the HTML page skin.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page. If you plan to use the template across page groups, select the Shared Objects page group. However, you can always move an HTML template to the Shared Objects page group if you decide that you want to use it across different page groups later.

4. In the Layout & Appearance section, click the **Create** link next to the **HTML Templates** heading.
5. On the resulting page, select **HTML Page Skin** from the **Template Type** drop-down list.
6. In the **Template Name** field, enter a name for the HTML page skin.

The Template Name must be unique within its page group. Use up to 50 characters. Multibyte characters are allowed. Use any character except the following:

, & # % \ / : * ? < > | "

Template Name is not case-sensitive. The portal stores it in uppercase.

Note: For additional information on the rules governing object naming in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. In the **Template Definition** field, enter HTML to define the template's appearance.

Use a combination of HTML, JavaScript, Oracle tags, and any other type of mark-up available for use in Web pages. To render Oracle Portal user interface elements within the template, use HTML page skin substitution tags. To view a list of available tags, click the link **tags as substitution variables** on the Create HTML Template page. For more information, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

Note: If you want to include calls to APIs within Oracle tags, they must be granted to public. For example, you cannot use `wwctx_api` to obtain session context information (such as current user) within HTML templates. Instead use the appropriate substitution tags.

8. Click **Create**.

The HTML page skin is created. A link to it appears at the top of the page. Click this link to make additional changes. For information on how to make changes to the template after you leave this screen, see [Section 12.3.1.3, "Editing an HTML Page Skin"](#).

9. Click **OK**.

12.3.1.2 Applying an HTML Page Skin

You can apply an HTML page skin to a navigation page, a standard page, custom pages that are based on the standard page type, a Portal Template for pages, or a Portal Template for items. Use HTML page skins to wrap an HTML table around page content and provide your own mark-up around the border of the page.

To apply an HTML page skin:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to which to apply the template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page to which to apply the template.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. On the resulting page, click the **Template** tab to bring it forward.
7. Select the **Use HTML Page Skin** radio button.
8. Select a template from the **Use HTML Page Skin** drop-down list.

When a page group and the Shared Objects page group both have a template of the same name, the page group name is added to the template name in pick lists. For example: `<template_name> (page_group_name)`. This assists in distinguishing between templates on pick lists.

9. Click **OK** to save your changes and exit page properties.

The page renders with the HTML page skin.

Click **Apply**, rather than **OK**, if you want to save your changes but remain on the Template tab. Click the **Preview** button on the Template tab to preview how the selected HTML page skin will display.

12.3.1.3 Editing an HTML Page Skin

As you fine-tune your HTML page skin template, Oracle Portal provides a quick, convenient way to access template content for editing.

To edit an HTML page skin template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the HTML page skin to be edited.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **HTML Templates** heading, click the link to the page skin to be edited.

This opens the template wizard with the selected template's content displayed.

5. Edit the template.
6. Click **OK** to save your changes and exit the wizard.

Click **Apply** to save your changes and remain in the wizard. Click the **Preview** button to preview how the template will display.

12.3.1.4 Detaching an HTML Page Skin from a Page

Detaching an HTML page skin from a page results in the removal of the objects, formatting, and layout that were provided by the page skin template. Once the skin is detached, page content renders according to the page's default settings.

To detach an HTML page skin from a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page from which to detach the template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page from which to detach the template.

This opens the page in Edit mode.

5. Click the **Page: Properties** link in the toolbar at the top of the page.
6. Click the **Template** tab to bring it forward.
7. Select the **Do not use a template** radio button.
8. Click **OK** to save your change and return to the page.

All formatting and content provided by the template is removed. The page renders with its default display settings.

12.3.2 Using HTML to Define the Layout and Appearance of Region Content

Use HTML content layout templates to control the way items, portlet borders, and their associated attributes display within a particular region. This section describes how to create, apply, and detach from an HTML content layout. It includes the following subsections:

- [Section 12.3.2.1, "Creating an HTML Content Layout"](#)
- [Section 12.3.2.2, "Applying an HTML Content Layout"](#)
- [Section 12.3.2.3, "Editing an HTML Content Layout"](#)
- [Section 12.3.2.4, "Detaching an HTML Content Layout Template from a Region"](#)

12.3.2.1 Creating an HTML Content Layout

Use HTML content layout templates to define the structure, colors, and fonts of region content. Apply HTML content layout templates to portlet and item regions. Oracle Portal provides a simple wizard for creating HTML content layout templates, which you can use to enter a combination of HTML, Oracle tags, HTML content layout substitution tags, and any other tags and scripting that is valid in HTML.

Note: HTML content layouts apply only to content item types, not to navigation item types. For example, the HTML content layout selected for a region will be applied to text items in the region, but not to list of objects items.

To create an HTML content layout template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the HTML content layout template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page. To enable sharing the template across page groups, select the Shared Objects page group. However, you can always move an HTML template to the Shared Objects page group if you decide that you want to use it across different page groups later.

4. In the Layout & Appearance section, click the **Create** button next to the **HTML Templates** heading.
5. On the resulting page, select **HTML Content Layout** from the **Template Type** drop-down list.
6. In the **Template Name** field, enter a name for the HTML content layout.

The Template Name must be unique within its page group. Use up to 50 characters. Multibyte characters are allowed. Use any character except the following:

, & # % \ / : * ? < > | "

Although Template Name is not case-sensitive, the portal stores it in uppercase.

Note: For additional information on the rules governing object naming in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. In the **Template Definition** field, enter HTML to define the template's appearance.

Use a combination of HTML, Oracle tags, HTML content layout substitution tags, and any other tags and scripting that is valid in HTML. To view a list of available HTML content layout substitution tags, click the link **tags as substitution variables** on the Create HTML Template page. For more information, see [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#).

Note: If you want to include calls to APIs within Oracle tags, they must be granted to public. For example, you cannot use `wwctx_api` to obtain session context information (such as current user) within HTML templates. Instead use the appropriate substitution tags.

8. Click **Create**.

The HTML content layout is created. A link to it appears at the top of the page. Click this link to make additional changes. For information on how to make changes to the template after you leave this screen, see [Section 12.3.2.3, "Editing an HTML Content Layout"](#).

9. Click **OK** to exit the wizard once you edit the template; or click **Cancel** to exit the wizard without editing the template.

12.3.2.2 Applying an HTML Content Layout

You can apply an HTML content layout to any editable item or portlet region. Before you can apply a content layout, the region type must be defined. You cannot apply an HTML content layout to an undefined region.

On pages that are based on a template, some regions are not editable. However, if the template includes a tab, users with enough privilege to edit a page can add another tab with an editable region. In such a case, the user could apply an HTML content layout template to the editable region on the new tab.

To apply an HTML content layout template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page to which to apply the HTML content layout template.
4. Under **Pages** in the Layout & Appearance section, click the link to the page to which to apply the template.

This opens the page in Edit mode.

5. Click the **Edit Region** icon on the region where you will apply the template ([Figure 12–8](#)).

Figure 12–8 The Edit Region Icon



6. On the resulting page, click the **Attributes** tab to bring it forward.
7. Select **Use HTML Content Layout**.

The option to use a content layout is selectable on the **Attributes** tab only when at least one content layout is defined in the page group or the Shared Objects page group.

8. Select a content layout from the **HTML Content Layout** drop-down list.

When a page group and the Shared Objects page group both have a template of the same name, the page group name is added to the template name in pick lists. For example: `<template_name> (page_group_name)`. This assists in distinguishing between templates on pick lists.

9. Click **OK**.

Region content is formatted as specified in the content layout template.

12.3.2.3 Editing an HTML Content Layout

As you fine-tune your HTML content layout template, Oracle Portal provides a quick, convenient way to access template content for editing.

To edit an HTML content layout template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the HTML content layout.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **HTML Templates** heading, click the link to the template to be edited.
5. Edit the template.
6. Click **Apply** to save your changes without exiting, or click **OK** to save your changes and exit the wizard.

12.3.2.4 Detaching an HTML Content Layout Template from a Region

Detaching an HTML content layout from a region results in the removal of the objects, formatting, colors, fonts, and layout that were provided by the content layout template. Items or portlets continue to display in the affected region along with any default attributes selected for the region's attribute settings.

To detach an HTML content layout template from a region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page from which to detach the template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, under the **Pages** heading, click the link to the page from which to detach the template.

This opens the page in Edit mode.

5. Click the **Edit Region** icon over the region that uses the HTML content layout template to be detached (Figure 12-9).

Figure 12-9 The Edit Region Icon



6. On the resulting page, click the **Attributes** tab to bring it forward.
7. Change the selection from **Use HTML Content Layout** to **Select Attributes**.
8. Click **OK**.

12.3.3 Using HTML to Create Templates for Database Portlets

The HTML templates you create for database portlets are also known as *Unstructured User Interface* templates, or UI templates. UI templates control the look and feel of the Web page on which an Oracle Portal database portlet is rendered when the portlet displays in full-page mode. Database portlets are those portlets built under the ownership of Portal Database Providers (as opposed to Web providers).

Unstructured User Interface templates are based on HTML code that you supply. You can enter the code directly into the template wizard, or create it using a third-party tool, then cut and paste that HTML into the wizard. Additionally, you can enter substitutions tags to stand in for such information as the current user's name, the Oracle Portal images directory, the portal schema owner, and the like.

You can also use `<oracle></oracle>` tags to include SQL statements or PL/SQL blocks in your UI template. Additionally, you can include HEAD elements, such as custom JavaScript, cascading style sheet references, and META tags.

By applying a UI template to a database portlet, you can automatically specify a portlet title, a title background, links to home and help pages, and background colors and images. UI templates are good for standardizing groups of database portlets in a provider. For example, you can design a UI template for a provider that includes the company logo in the heading, the company name in the title, and an industry-related background image. By seeing that every database portlet in the provider uses the same UI template, you can ensure that such portlets display in a standard, controlled way to all users.

This section describes how to work with UI templates. It includes the following subsections:

- [Section 12.3.3.1, "Creating an Unstructured User Interface Template"](#)
- [Section 12.3.3.2, "Applying an Unstructured User Interface Template"](#)
- [Section 12.3.3.3, "Editing an Unstructured User Interface Template"](#)
- [Section 12.3.3.4, "Deleting an Unstructured User Interface Template"](#)

12.3.3.1 Creating an Unstructured User Interface Template

To create an unstructured UI template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Click the **Providers** tab to bring it forward.
4. Click the **Locally Built Providers** link.
5. Click the **Shared Components** link.
6. Click the **User Interface Templates** link.
7. Next to **Create New**, click the **User Interface Template** link.
8. Click the **Unstructured UI Template** link.
9. In the **Template Name** field, enter a name for the template.

The name must be unique within the objects in the Shared Components provider. Use up to 50 bytes. This equals 60 ASCII bytes, but fewer multibyte characters. Use any character except the following:

, & # % \ / : * ? < > | "

10. In the **Template Definition** field, enter the HTML or other Web-standard code for your template.

Click the **tags as substitution variables** link for a list of substitution tags available for use in your template. See [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#) for a list and description of these database portlet substitution tags.

You can use `<oracle></oracle>` tags in your HTML to include SQL statements or PL/SQL blocks in your template.

Note: If you want to include calls to APIs within Oracle tags, they must be granted to public. For example, you cannot use `wwctx_api` to obtain session context information (such as current user) within HTML templates. Instead use the appropriate substitution tags.

11. Click **Preview** to see how the template definition displays.
12. Click **Create** when you are finished to save your changes and exit the wizard.

12.3.3.2 Applying an Unstructured User Interface Template

Data components always display within the context of a UI template when viewed in full-page mode. They use either a default template provided by the portal or a template you select. You cannot detach a UI template from a data component, but you can select a template other than the default. Additionally, should you want a data component to display on a blank page when displayed in full-page mode, you can create a simple template that does not include any colors, objects, or formatting, then select that in lieu of a populated UI template.

You can apply a UI template when you create a data component or when you edit one. This section describes how to apply a UI template when you edit a data component.

To apply a UI template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Click the **Providers** tab to bring it forward.
4. Click the **Locally Built Providers** link.
5. Under the **Name** column, click the link to a database provider that contains the data component to which to apply a template.
6. On the resulting page, click the **Edit** link next to the data component (portlet) to which to apply a template.
7. Click the final tab in the series, **Data Component and Personalization Form Text** ([Figure 12–10](#)).

Figure 12–10 *Data Component and Personalization Form Text Tab Icon*



8. From the **Template** drop-down list, select the UI template to apply to the data component.
9. Click **OK** to save your change and go to the Develop Data Component screen.

You can perform additional management tasks on the data component on this screen.

10. Click **Close** to return to the Portal Navigator.

12.3.3.3 Editing an Unstructured User Interface Template

To edit an unstructured UI template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Click the **Providers** tab to bring it forward.
4. Click the **Locally Built Providers** link.
5. Click the **Shared Components** link.
6. Click the **User Interface Templates** link.
7. Click the **Edit** link next to the UI template to be edited.
8. Make your changes to the template.

If you change the name of the UI template, keep in mind that the name must be unique among the object names within the Shared Components provider. Use up to 50 bytes. This equals 60 ASCII bytes, but fewer multibyte characters. Use any character except the following:

, & # % \ / : * ? < > | "

9. Click **OK** to save your changes.

12.3.3.4 Deleting an Unstructured User Interface Template

When you delete an unstructured UI template, the default template is automatically applied to any components that used the deleted template. The default unstructured UI template is the one at the top of the pick list of unstructured UI templates.

To delete an unstructured UI template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Click the **Providers** tab to bring it forward.
4. Click the **Locally Built Providers** link.
5. Click the **Shared Components** link.
6. Click the **User Interface Templates** link.
7. Click the **Delete** link next to the UI template to be deleted.
8. On the resulting page, click **Yes** to confirm the deletion.

12.3.4 Copying HTML Templates

A quick way to create a new HTML template is to copy an existing one. The procedures for copying HTML templates differs between unstructured user interface templates and the other types of HTML templates. This section describes both procedures. It includes the following subsections:

- [Section 12.3.4.1, "Copying an HTML Page Skin or Content Layout Template"](#)
- [Section 12.3.4.2, "Copying an Unstructured User Interface Template"](#)

12.3.4.1 Copying an HTML Page Skin or Content Layout Template

To copy an HTML page skin or content layout template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the HTML template to be copied.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the **Layout & Appearance** section, click the **Browse** link next to **HTML Templates**.
5. On the resulting Portal Navigator page, click the **Copy** link next to the HTML template to be copied.
6. In the **New Template Name** field, provide a new name for the template.

The New Template Name must be unique within its page group. Use up to 50 characters. Multibyte characters are allowed. Use any character except the following:

, & # % \ / : * ? < > | "

Although Template Name is not case-sensitive, the portal stores it in uppercase.

Note: For additional information on the rules governing object naming in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

7. Click **OK** to save your change and exit the Copy Template page.

12.3.4.2 Copying an Unstructured User Interface Template

To copy an unstructured UI template:

1. Log in to Oracle Portal.
2. Click the **Navigator** link at the top of the page.
3. Click the **Providers** tab to bring it forward.
4. Click the **Locally Built Providers** link.
5. Click the **Shared Components** link.
6. Click the **User Interface Templates** link.
7. Click the **Copy** link next to the UI template to be copied.
8. Edit the value in the **New Template Name** field.
9. Click **OK** to save your change.

12.3.5 Sharing an HTML Template Across Page Groups

Move an HTML Template to the Shared Objects page group to make it available for use in all portal page groups.

Note: Objects can be moved to the Shared Objects page group—whose default language is English—from a non-English page group only if the object already has an English translation. This applies to all promotable objects:

- Item types
 - Page types
 - Attributes
 - Categories
 - Perspectives
 - Styles
 - HTML templates
-
-

To move an HTML template to the Shared Objects page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. Click the **Navigator** link at the top of the page.
This opens the Portal Navigator.
4. In the Portal Navigator, click the **Page Groups** tab to bring it forward.
5. Click the page group link for the page group that contains the style to be moved.
6. On the resulting page, click the **HTML Templates** node.
Only the HTML templates you are authorized to see and the actions you are authorized to perform are displayed.
7. Click the **Moved to Shared** link next to the HTML template to be moved to the Shared Objects page group.
8. In the confirmation page, click **Yes** to move the HTML template.

12.4 Deleting Templates from Oracle Portal

When you delete a template, the results vary depending on the type of template you delete. This section discusses these different results and lists the steps to take to delete different kinds of templates. It includes the following subsections:

- [Section 12.4.1, "Deleting a Portal Template"](#)
- [Section 12.4.2, "Deleting an HTML Template"](#)

Note: To delete a template, you must have at least one of the privileges outlined in the "[Intended Audience](#)" section of this chapter, or the page privilege *Manage* on the template.

12.4.1 Deleting a Portal Template

When you delete a Portal Template for *pages*, any pages that were based on the template are automatically detached from the template. The layout, look and feel, and

objects provided by the template remain on the pages that used the template. But they now belong to those pages.

For example, if the deleted template provided two item regions and a company logo, once the template is deleted all pages that were based on that template continue to display two item regions and a company logo. The layout and the logo are now owned by the page to which the deleted template was applied.

If your goal is to detach a page from its template, deleting a template is not the best way to do this. Rather, simply detach the page from its template. For more information on detaching a page from its template, see [Section 12.2.1.4, "Detaching a Portal Template from a Page"](#) and [Section 12.3.1.4, "Detaching an HTML Page Skin from a Page"](#).

When you delete a Portal Template for *items*, none of the template's objects nor the page layout or look and feel are retained. When users click an item link that used to render the item within a template, just the item content displays. Any images, additional regions, or look and feel that were provided by the template no longer display.

To delete a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, choose the page group that owns the Portal Template to be deleted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Browse** link next to the **Portal Templates** heading.
5. On the resulting Portal Navigator page, click the **Delete** link next to the relevant Portal Template.

Tip: If the template is used by more than one page group, it will be under the Shared Objects page group.

6. On the confirmation page, click **Yes**.

12.4.2 Deleting an HTML Template

When you delete an HTML content layout, any formatting or layout that was provided by the template is removed. When you delete an HTML page skin, affected pages display without the surrounding border that was provided by the template. Nothing of an HTML template remains on the pages or regions that used it.

To delete an HTML template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet's **Work In** drop-down list, choose the page group that owns the HTML template to be deleted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Browse** link next to the **HTML Templates** heading.
5. On the resulting Portal Navigator page, click the **Delete** link next to the relevant HTML template.

Tip: If the template is used by more than one page group, it will be under the Shared Objects page group.

6. On the confirmation page, click **Yes**.

12.5 Troubleshooting Templates

The Browse Users icon does not display on the Access tab

The portal administrator may have run the script `serlACL.sql` to enforce role-based security. Role-based security limits privilege grantees to groups; individual users cannot be granted privileges. The script does not affect privileges granted to users before it was run, only after. Once this script is run, the Browse Users icon does not display next to the Grantee field on Access tabs. Additionally, the Privileges tab does not display on the Edit Portal User Profile page.

For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

I created a page and did not apply a template, yet a template is attached when I click Finish.

It's likely that a default template has been selected at the page group level. You can find this control on the Configure tab of page group properties, under Page Defaults. If **Use Default Properties When Creating Page** is selected, and a default template is selected under Default Template, that template is automatically applied to every new page, unless it is explicitly de-selected when you create or edit the page.

One way around this is to take every step of the page creation wizard, rather than clicking Finish once you've entered the essentials. When you get to the template selection step, de-select the default template by choosing **Do not use a template**.

Another way around this, once the page is created, is to edit page properties, and select **Do not use a template** on the **Template** tab of page properties.

Why can't I add content to a region?

You may not have sufficient privileges to add content. You must have at least the page (or tab) privilege *Manage Content* or *Manage Items with Approval* on the page or on the tab that contains the region.

If the page is based on a Portal Template, and the template region is locked, no one can add content to the region, unless they do so through a WebDAV client. If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To unlock a region:

1. Open the page or Portal Template in Edit mode, and edit the region.
2. Select **Enable Users To Included Content In This Region**.
3. Click **OK** to save your changes and return to the page or Portal Template.

My template is not displaying on the template pick lists in my page group.

For a template to be available for use, the option **Make available for use in this page group** must be selected. You will find this option on the **Main** tab of template properties.

A template is not listed in the Page Groups portlet or the Portal Navigator.

For a template to display in either of these locations, you must, at minimum, have the *View* privilege on the template. Ask the template owner or the page group or portal administrator for access privileges on the template.

I cannot change the style of my personal view of the page.

If the page is based on a template, it could be that the template designer or did not select **Enable Pages To Use Different Style**. When this option is not selected for the template, the Style tab does not display when users personalize the page.

It could also be that the page group property, **Allow Privileged Users To Personalize Page Style** is not selected. For more information, see [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#).

I cannot change the access settings for my page.

If the page is based on a template, the template designer may have prevented users from setting their own page access by clearing the option **Enable Pages to Have Different Access**. Clearing this option prevents users from choosing different access control settings when they create or edit pages that are based on a template. Such pages always use the template access control settings.

This option is available on the Access tab of template properties.

Some of the objects on my template are not displaying.

It could be that the template is being used on a translated page and that objects on that template have not been translated. When a template that was created in the portal's default language is applied to a translated page, only the template objects that have also been translated display on the template.

Add translations for all template content. For more information, see [Chapter 19, "Translating Portal Content"](#).

If the template is a Portal Template for items, it could be that the item placeholder is in a non-active state, such as *Draft*, *Pending*, *Rejected*, *Hidden*, *Expired*, and so on. The item placeholder must be active for it, or the content that replaces it, can be displayed on the rendered page.

I created an HTML page skin; now I can't find it.

If you're sure you have the right page group selected in the Page Groups portlet, click the **Browse** link next to the HTML Templates heading under Layout & Appearances. This takes you to the Portal Navigator, specifically to the HTML Templates node under the page group selected in the Page Groups portlet **Work In** drop-down list. Scroll through the listed templates.

If you still cannot find your template, enter the template name in the Portal Navigator **Find** field and click **Go**. The HTML template you are looking for should be listed in the search results.

I uploaded a draft item and now cannot see it on my page in Pending Items Preview.

When a page or template is cached at the system level, and Approvals and Notifications are enabled for the page group, unpublished items, such as *Draft*, *Pending*, *Rejected*, and *Deleted Rejected* items, do not display as expected. For this reason, do not cache approval-enabled pages or templates at the system level. For more information, see [Chapter 21, "Improving Page Performance"](#).

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

I published a page as a portlet, placed it on a page, and displayed selected regions. Now it is displaying blank.

This involves the source page and a Portal Template. When you edit or personalize the Page portlet to display selected regions, and a change is made to the portlet's source page regarding the template—either a template is added or detached or a template region equivalent to a region selected for display on the portlet is deleted—the portlet cannot resolve such changes with its Display Selected Regions setting. The result is that the portlet displays without content—or blank. To resolve this situation, re-edit or personalize the portlet's region display settings.

To personalize a portlet, in page View mode click the Personalize link in the portlet header. For more information on restricting the display of regions in a page portlet, see [Section 8.5.3, "Selecting Page Portlet Regions for Display"](#).

My style specifies a page background color, but no color displays.

When a page uses an HTML page skin template, the page background color is taken from the template and any background color specified in a defined style is ignored.

An exception to this is when the page skin uses a class generated by an Oracle Portal style. For example, you can place an Oracle Portal style element class in the <body> HTML tag: `<BODY style="margin:0px" class="Bodyid2siteid0">`. Should you change the style declaratively, through the Oracle Portal user interface, the change is reflected as well in the template that references the style class.

This enables you to change the Background Color of all pages that use the page skin through the declarative style. (For more information on Oracle Portal style element classes, see [Chapter 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#).)

I cannot delete a tab/region from my Portal Template.

You can delete tabs and regions from Portal Templates only if you have sufficient privileges to delete tab content on the pages that are based on the template.

Designing Your Portal's Navigation

One of the most important considerations in the creation of your portal is the design and construction of its navigation. Of primary importance is an effortless, intuitive scheme for navigating through and locating your company's vital information.

Figure 13–1 Use Navigation Page Portlets for Consistent Site Navigation



Oracle Portal provides pre-built navigation-related objects that assist you with rapid construction of meaningful, thorough site navigation. These include automatically structured links to your portal's home page, automatically parsed and easily configured breadcrumbs, automatic gathering and publishing of objects with a common classification, and navigation pages.

This chapter provides information about navigation in Oracle Portal and describes how to work with navigational elements. It contains the following sections:

- [Section 13.1, "Understanding Navigation in Oracle Portal"](#)

- [Section 13.2, "Creating or Copying a Navigation Page"](#)
- [Section 13.3, "Publishing a Navigation Page as a Portlet"](#)
- [Section 13.4, "Adding a Navigation Page to a Page"](#)
- [Section 13.5, "Deleting a Navigation Page"](#)
- [Section 13.6, "Populating a Navigation Page with Navigation Elements"](#)
- [Section 13.7, "Troubleshooting Navigation Pages"](#)

Intended Audience

The content of this chapter is intended for users who will work with site navigation. Navigation pages, sub-page links regions, and navigation item types require different access privileges for different types of objects:

- To work with navigation pages, you need at least page group privilege *Manage All* on the page group where you will create the navigation page.
- To delete a navigation page, you need at least the page privilege *Manage* on the navigation page.
- To work with sub-page links regions, you need at least the page privilege *Manage* on the page where you will add the region.
- To add navigation item types, you need at least the page privilege *Manage Content* or *Manage Items With Approval* on the page.

If a particular task requires different privileges than those listed here, those privileges are listed before the steps of that task.

13.1 Understanding Navigation in Oracle Portal

Oracle Portal provides opportunities for adding site navigation both manually and declaratively. On the manual end, create your own navigation pages, publish them as portlets, and add them anywhere on a page. On the declarative end, configure custom search portlets to find content by attribution, such as by its category, perspective, create date, author, and so on, and publish results automatically in page portlets.

This section provides a brief overview of these navigation objects and elements. It contains the following subsections:

- [Section 13.1.1, "Navigation Pages"](#)
- [Section 13.1.2, "Smart Links, Breadcrumbs, Search Boxes, and Object Map Links"](#)
- [Section 13.1.3, "Custom Searches"](#)

13.1.1 Navigation Pages

A navigation page is a special type of page that can be included on other pages to provide a consistent set of navigational elements. A navigation page might contain a logo, the page title, a login link, and links to main pages, such as a home page and any other top-level portal pages. Typically, navigation pages are used for navigation bars, page banners, and page footers.

Navigation pages are excluded from searches, preventing their unnecessary inclusion in search result sets.

Creating a navigation page is similar to creating a standard page: create a page, devise a layout, apply a style, and add content. Then take the extra step of publishing it as a portlet. Once it is published as a portlet, a navigation page becomes available for

selection on a banner pick list in the Create Page wizard. From here, other users can add it to their pages. Navigation pages that are published as portlets can be added to any portlet region on a page.

Although you can add any item or portlet to a navigation page, and even divide your navigation page into several regions, bear in mind that the idea is to add navigation pages to other pages. Consider designing navigation pages that take up as little space as possible, so that when they are added to other pages, there is still plenty of room for the rest of the page content.

For information on publishing a navigation page as a portlet, see [Section 13.3, "Publishing a Navigation Page as a Portlet"](#). For information on selecting a default navigation page for a page group, see [Section 4.5.4, "Choosing a Default Navigation Page for a Page Group"](#).

13.1.2 Smart Links, Breadcrumbs, Search Boxes, and Object Map Links

Oracle Portal provides built-in navigation item types that you can use for rapid construction of site navigation. Among these are Smart Links, Breadcrumbs, Search Boxes, and Object Map Links.

Smart Links get their values automatically from previously configured portal properties. For example, when page group administrators create page groups, they can specify a contact e-mail address. To place this information on a page, all you do is add the *Contact* Smart Link item. The appropriate e-mail address is automatically fetched from the page group configuration information, and the specified address displays on the page. You could add a Contact Smart Link to a Portal Template in the Shared Objects page group. No matter which page group used that template, the correct contact information would always display on the page.

Other automatically created Smart Links include Account Information links; Advanced Search links; and links to your portal's Home, the Portal Navigator, the Portal Builder, the Portlet Repository, and the personal page of the currently logged-in user.

Another built-in navigation item type is the *Page Path* Smart Link ([Figure 13–2](#)). This element is more familiarly known as *breadcrumbs*. Once placed, you can configure the number of steps up the page hierarchy the breadcrumbs should display and the separator to use between each breadcrumb.

Figure 13–2 Page Path Item (Breadcrumbs) Showing Two Levels up the Page Hierarchy

[sample root page](#) * [sample_subpage_1](#) * [sample_subpage_a](#)

The Basic Search Box Smart Link provides a quick way to enable your users to search for specific portal content. Simply place it on a page, and you're done. Users can enter search criteria based on content attributes, such as display name, author, publication date, keywords, and, perhaps most usefully, content classification, such as the object's assigned category or one of its perspectives. This is an easy way to assist your users in getting to specific types of content rapidly.

For information on working with built-in navigation item types, see [Section 13.6, "Populating a Navigation Page with Navigation Elements"](#).

13.1.3 Custom Searches

Traditionally, you might think of navigation as a tool for clicking a series of links to get to content. The Custom Search portlet provides a navigation method that brings the content to you.

The Custom Search portlet is a powerful tool for automatically serving up fresh, focused content to your users. Use it to set up a query that executes automatically every time a user accesses a page. Your query can specify a search for all content that is classified under a particular category or perspective, is written by a certain author, was published on a certain date. Search against any type of attribute associated with your portal content. This includes custom attributes that you create.

The query can execute automatically and publish results in the same portlet from which it was executed. This means that you could place one or more Custom Search portlets on a page, and have each of them serve up a particular type of content. You could guarantee the freshness of that content by managing the values of the attributes that serve as search criteria. For example, if a Custom Search portlet automatically searches for all items with a Create Date greater than the start of the week, you could use that as a basis for a *New This Week* region on your page. Once a week, the content manager could update the date to filter out anything older than the start of the current week.

You can specify more than one search criterion for a Custom Search portlet. Doing so makes it possible to refine the search so that a specific class of content is served up in a given portlet.

For more information about Custom Search portlets, see [Chapter 16, "Working with Search Portlets"](#).

13.2 Creating or Copying a Navigation Page

Navigation pages enable you to provide a standard set of navigational elements that can be included on the pages in a page group. Navigation pages can be used across page groups when they are created in the Shared Objects page group.

The process of creating a navigation page involves three main steps: creating the page, populating it with navigation and non-navigation elements, and publishing it as a portlet. This section describes how to create a navigation page. [Section 13.6](#) describes how to add navigation elements to it or to any other page. [Section 13.3](#) describes how to publish a navigation page as a portlet.

Copying a navigation page is similar to creating one. As you create the page, you are given the option to base it on an existing page. Once you make a selection from the navigation pages that are offered, click OK, and you have your copy.

To create or copy a navigation page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select a page group to own the navigation page.

Tip: To use this navigation page in more than one page group, create it in the Shared Objects page group. However, keep in mind that to use a shared navigation page in a page group with a non-English default language, a translated version of the shared navigation page must be provided.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. In the Layout & Appearance section, click the **Create** link next to the **Navigation Pages** heading.

This opens the Create Navigation Page screen.

5. In the **Display Name** field, enter a Display Name for the navigation page.

Use up to 256 characters of any kind. The Display Name is used to identify the navigation page in the Page Groups portlet and the Portal Navigator.

Note: An asterisk (*) indicates a field that requires a value.

For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

6. In the **Copy From** list, choose a navigation page to use as a starting point for your new navigation page.

This creates a copy of the selected page. The list includes all the navigation pages in this page group on which you have at least the page privilege *View*.

To start with a blank navigation page, choose **<None>**.

7. Select or clear **Publish As Portlet**.

- Selecting makes this navigation page available to other users.
- Clearing prevents the display of this navigation page on pick lists.

Eventually you will need to publish the navigation page as a portlet so that other users can add it to their pages. However, while the navigation page is under development, you might prefer to clear this check box.

Note: If you do not see the Publish As Portlet check box, you do not have portlet publishing privileges. Contact your portal administrator to request these privileges.

8. Click **Create**.

The navigation page opens in Edit mode.

After creating your navigation page, you can add items, portlets, and regions to it. For information about adding content to a page, see [Chapter 14, "Working with Items"](#) and [Chapter 15, "Working with Portlets"](#). See also, [Section 13.6, "Populating a Navigation Page with Navigation Elements"](#).

13.3 Publishing a Navigation Page as a Portlet

The option to publish a navigation page as a portlet is selected by default when the page is being created. The navigation page creator may have de-selected this option, preventing the navigation page from being used. This section describes how to publish a navigation page when this is the case.

To publish a navigation page as a portlet:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the navigation page to be published.

4. Go to the **Navigation Pages** section under **Layout & Appearance**, and click the link to the relevant navigation page.
The navigation page opens in Edit mode.
5. Click the **Navigation Page: Properties** link in the toolbar at the top of the page.
6. Click the **Optional** tab to bring it forward.
7. In the **Publish as Portlet** section, select **Publish As Portlet**.
8. Optionally, select **Use Style Of Page On Which Portlet Is Placed**.
Select this option to use the styles of the pages on which the navigation page portlet is placed rather than the source navigation page's own style. But see the following note.

Note: A navigation page is a page portlet. As such, there are some style considerations to keep in mind when you want to harmonize the appearance of your navigation page portlet with the style of the page it is placed on. For more information, see [Section 11.5.4, "Controlling Styles for Page Portlets and Navigation Pages"](#).

9. Optionally, enter a **Display Name** for the navigation page portlet.
This name will display in the navigation page portlet's header, if portlet headers are exposed in the region that hosts the navigation page. For more information, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).
10. Click **OK** to save your changes and return to the navigation page.

13.4 Adding a Navigation Page to a Page

To provide consistent navigation throughout a page group, you can create a navigation page and add it to every page in the page group (or to a Portal Template).

To add a navigation page to a page or a template, the navigation page must be published as a portlet. You'll find information on publishing a navigation page as a portlet in the previous section ([Section 13.3](#)). For information on creating a navigation page, see [Section 13.2, "Creating or Copying a Navigation Page"](#).

Keep in mind that any Smart Link on the navigation page always renders within the context of the containing page. This is true even when the navigation page is exposed on a page that is published through the Page portlet. For example, add an *Edit* Smart Link to the *Accounts Navigation Page*. Place the *Accounts Navigation Page* on the *Blakewell Account Page*. Click the Edit link, and the *Blakewell Account Page* displays in Edit mode. Now place a Page portlet on the *General Accounts Page*, and publish the *Blakewell Account Page* through the Page portlet. Click the Edit link in the *Accounts Navigation Page*. This will render the *General Accounts Page* (and not the *Blakewell Account Page*) in Edit mode.

The same is true when you place a Smart Text item on a navigation page. For example, add the Smart Text item, **Current Page** to a navigation page. Place the navigation page on a page named *Human Resources*. The Smart Text item displays *Human Resources*. Publish the *Human Resources* page as a portlet, then place the portlet on a page named *Research and Development*. The Smart Text item rendered in the portlet is *Research and Development*, rather than its original *Human Resources*. The Smart Text item is rendering within the context of the containing page (*Research and Development*).

To add a navigation page to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to add a navigation page.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under the **Pages** heading in the Layout & Appearance section, click the link to the relevant page.
This opens the page in Edit mode.
5. Click the **Add Portlet** icon in the region to contain the navigation page (Figure 13-3).

Figure 13-3 The Add Portlet Icon



This takes you to the Portlet Repository.

6. In the Portlet Repository, enter the name of the navigation page in the **Search** field and click **Go**.
Alternatively, if you know the navigation page's page group, click the **Published Portal Content** node and then the page group's name under this node to locate the navigation page portlet.
7. In the **Portlet Repository Search Results**, click the navigation page name to move it to the **Selected Portlets** list.
8. Click **OK** to return to the page.

Tip: You might want to edit the properties of the region that hosts the navigation page. For example, you may want to change the region width to improve the way the navigation page looks on the page. To edit region properties, click the **Edit Region** icon associated with the relevant region. For more information, see [Section 10.2, "Configuring Region Display Options"](#).

13.5 Deleting a Navigation Page

Delete a navigation page when it is no longer useful. If one or more pages are using a deleted navigation page, the navigation page will no longer appear on those pages.

To delete a navigation page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the navigation page to be deleted.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page. If the navigation page is used by more than one page group, it will be under the Shared Objects page group.
4. In the Layout & Appearance section, click the **Browse** link next to the **Navigation Pages** heading.

This opens on a list of navigation pages in the Portal Navigator.

5. Click the **Delete** link next to the relevant navigation page.
6. On the confirmation page, click **Yes**.
7. Optionally, click the **Builder** link to return to the Portal Builder page.

13.6 Populating a Navigation Page with Navigation Elements

Oracle Portal comes with a number of pre-built navigation item types that simplify and speed the task of constructing site navigation. Navigation-type items are the types of items you are most likely to add to your navigation pages; however, you can include other types of items on your navigation pages, including images, text, page links, and URLs. Additionally navigation-type items can be added to page types other than navigation pages. The next sections discuss how to add built-in navigation item types to a page. They include:

- [Section 13.6.1, "Adding a Basic Search Box Item"](#)
- [Section 13.6.2, "Adding a List of Objects Item"](#)
- [Section 13.6.3, "Adding a Login/Logout Link Item"](#)
- [Section 13.6.4, "Adding an Object Map Link Item"](#)
- [Section 13.6.5, "Adding a Page Path Item \(Breadcrumbs\)"](#)
- [Section 13.6.6, "Adding a Portal Smart Link Item"](#)
- [Section 13.6.7, "Adding a Portal Smart Text Item"](#)
- [Section 13.6.8, "Displaying Links to Sub-Pages"](#)

For information about adding non-navigation item types, see [Chapter 14, "Working with Items"](#).

13.6.1 Adding a Basic Search Box Item

The Basic Search Box ([Figure 13–4](#)) is a pre-built search feature that can add instant search capability to a page. Users can search for content-related attribute values, such as an author's name, a publication date, keywords, and content classifications, including a category or a perspective.

Figure 13–4 Basic Search Box Item



Use the following steps to add a basic search box to a page. You can specify whether users of the search box can search all page groups or only the page groups you specify.

To add a Basic Search Box item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or **Navigation Pages**) heading in the **Layout & Appearance** section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item (Figure 13-5).

Figure 13-5 The Add Item Icon



If the **Add Item** icon does not display on the region, the region may be a portlet region. In this case, you cannot add items to this region unless you change its type. For more information, see [Section 10.2.2, "Changing a Region Type"](#).

6. On the **Item Type Selection** page, choose **Basic Search Box** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The **Item Type Selection** page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the **Add Item** icon, the **Item Attributes** page is displayed.

7. Click **Next**.
8. On the **Item Attributes** page, enter the width of the search box in the **Search Box Width** field.
9. In the **Search in Page Group** field, select a page group to search.
Select **All Page Groups** for the search to include all page groups.
10. In the **Search Icon** field, enter the location of the image.

Use the first field to enter or browse for the image on your file system. Alternatively, use the second field to enter the URL of an image or to reuse an image that has already been uploaded to the portal. To reuse an image, enter its internal name (the name Oracle Portal assigns to it) without a path into the second field, for example, 1645.GIF.

To obtain the internal name Oracle Portal has assigned to an image, go to a place within your portal where the image is already in use; right click it; and select **Properties** from the right-click menu.

Note: If you are using item versioning and you always want to show the current version of an image, see [Section 14.12.4, "Images and Item Versioning"](#).

11. In the **Search Label** field, either:
 - Enter a label for the search box.
This field is not translated. The exact text in this field is used for all languages.
 - Or, select **Use the Default Search Label** to use the portal default search label.

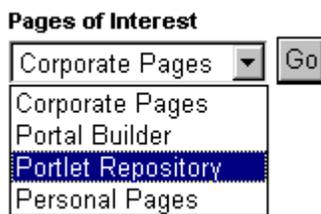
This option is translated into each installed language.

12. Click **Finish** to save your changes and return to the page.

13.6.2 Adding a List of Objects Item

Use lists of objects (Figure 13–6) to provide a quick way for users to jump to a page of interest or to a list of all objects classified under a particular category or perspective. You can choose which pages, categories, or perspectives appear on the list, making it an easy way to provide access to some objects while hindering access to others.

Figure 13–6 *List of Objects Item*



You can choose whether to display this list as a drop-down list (Figure 13–6) or as a list of links (with or without associated images).

To add a List of Objects item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item (Figure 13–7).

Figure 13–7 *The Add Item Icon*



If the **Add Item** icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **List of Objects** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.
8. On the Item Attributes page, enter a name for the List of Objects in the **Display Name** field.
9. In the **Display Type** field, select the display type for the list of objects item.
Choose from:
 - **Drop-down List**—A list that drops down when clicked to display available selections
 - **Links**—A list of links to each object
 - **Links/Images**—A list of either text links or a linked images; images are used when the selected object has an associated image (see [Section 7.7, "Specifying a Representative Image for a Page"](#), [Section 5.3.1, "Working with Categories"](#), and [Section 5.3.2, "Working with Perspectives"](#))
10. Select **Display Objects Alphabetically** to display the objects in the list alphabetically.
11. In the **Select objects to add to your list** section, click the **Browse** icon next to an object type to add to your list.
12. In the resulting window, click the **Return Object** link next to an object to add to your list.
Click the **Plus** icon to the left of an object to expand the list of available objects.
13. Repeat steps 11 and 12 until you complete your list.
Click the **Delete** icon to remove an object from the list of objects item. Click the **Rearrange** icon to rearrange objects in the list of objects item.

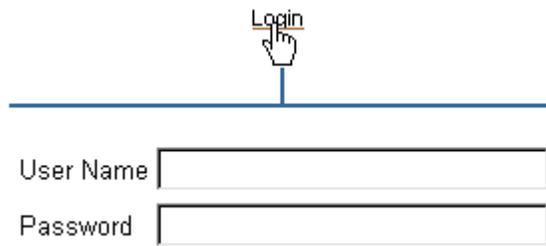
Note: When an object that is included in a list of objects item is moved, the object's reference in the list of objects is lost.

14. Click **Finish** to save your changes and return to the page.

13.6.3 Adding a Login/Logout Link Item

Add login/logout links, icons, or both to provide an easy means for users to log in to and log out of your portal ([Figure 13–8](#)). One way to use this item is to make it available on public pages to expand your users' portal access options.

Figure 13–8 Login/Logout Link Item



To add a Login/Logout Link item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region in which to add the item (Figure 13–9).

Figure 13–9 The Add Item Icon



If the **Add Item** icon does not display next to the region, the region may be a portlet region (and may contain portlets). In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **Login/Logout Link** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.
8. On the Item Attributes page, go to the **Login Link** field and do one of the following:
 - Enter text that users click to log in to the portal. This text is not translated.
 - Select **Use The Default Login Link**. This text is translated into each installed language.

9. Optionally, in the **Login Icon** field, enter the path and file name of an image to associate with the login link, or click **Browse** to locate the image.

Example: c:\webart\login.gif

The file is uploaded to the page when you click **Finish**. The Login Icon option is not available for mobile pages.

10. In the **Logout Link** field, either:

- Enter text that users click to log in to the portal. This text is not translated.
- Select **Use The Default Logout Link**. This option is translated into each installed language.

11. Optionally, in the **Logout Icon** field, enter the path and file name of the image to associate with the logout link, or click **Browse** to locate the image.

Example: c:\webart\logout.gif

The file is uploaded to the page when you click **Finish**. The Logout Icon option is not available for mobile pages.

12. Next to **Select a page**, choose a page to display to users after they log in.

Choose either:

- **This Page (*page_name*)**—To specify the page on which you are placing the Login/Logout Link.
- **User's Home Page**—To specify the user's home page. This value is fetched from the user's personal portal account. If the user has not specified a home page in his account, it defaults to the home page specified for the user's default group. (A user's default group is specified when the user is added to the portal.) If no home page is specified for the user's default group, it defaults to the home page specified in the Global Settings portlet.

13. If you selected an image for the login/logout link, select an alignment from the **Image Alignment** drop-down list.

Because mobile pages do not include the option for login/logout link images, the Image Alignment option is irrelevant for mobile pages.

[Table 13-1](#) lists, describes, and illustrates examples of image alignment options.

Table 13-1 Item Image Alignment Options

Alignment	Description	Example
Left	Aligns the image on the left side of the page.	 Item image alignment This item demonstrates the effect of choosing the Left item image alignment option.
Right	Aligns the image on the right side of the page.	Item image alignment This item demonstrates the effect of choosing the Right item image alignment option. 
Top	Aligns the top of the image with the top of the display name.	 Item image alignment This item demonstrates the effect of choosing the Top item image alignment option.

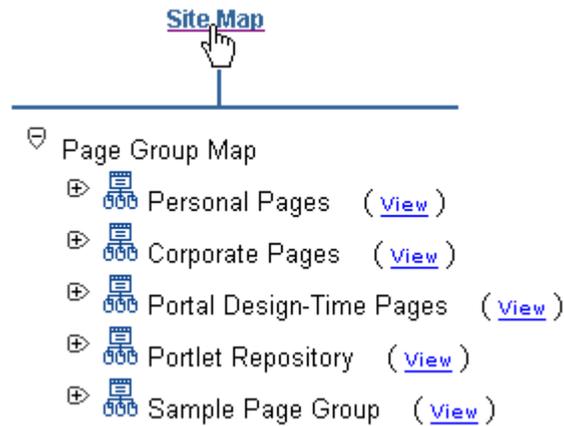
Table 13–1 (Cont.) Item Image Alignment Options

Alignment	Description	Example
Bottom	Aligns the bottom of the image with the baseline of the display name. Same as Baseline.	 Item image alignment This item demonstrates the effect of choosing the Bottom item image alignment option.
Absolute Middle	Aligns the middle of the image with the absolute middle of the display name.	 Item image alignment This item demonstrates the effect of choosing the Absolute Middle item image alignment option.
Absolute Bottom	Aligns the bottom of the image with the absolute bottom of the display name.	 Item image alignment This item demonstrates the effect of choosing the Absolute Bottom item image alignment option.
Text Top	Aligns the top of the image with the top (tallest text) of the display name.	 Item image alignment This item demonstrates the effect of choosing the Text Top item image alignment option.
Middle	Aligns the middle of the image with the baseline of the display name.	 Item image alignment This item demonstrates the effect of choosing the Middle item image alignment option.
Baseline	Aligns the bottom of the image with the baseline of the display name. Same as Bottom.	 Item image alignment This item demonstrates the effect of choosing the Baseline item image alignment option.
Image Above Link	Aligns the image over the display name.	 Item image alignment This item demonstrates the effect of choosing the Image Above Link item image alignment option.

14. Click **Finish** to save your changes and return to the page.

13.6.4 Adding an Object Map Link Item

An Object Map Link item ([Figure 13–10](#)) is a link to a page that lists all page groups and sub-pages in your portal (the *object map* or *site map*). Users can view only those pages to which they have access. Use the object map to provide rapid navigation to other locations within your portal.

Figure 13–10 Object Map Link Item

To add an Object Map Link item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item (Figure 13–11).

Figure 13–11 The Add Item Icon

If the **Add Item** icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **Object Map Link** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.
8. On the Item Attributes page, enter text for the link in the **Display Name** field.
9. Optionally, enter the location of an image icon.

Click the **Browse** button next to the first field to locate and select an image on your file system. This uploads the image into the portal. Alternatively, use the second field to enter the URL of an image or to reuse an image that has already been uploaded to the portal. To reuse an image, enter its internal name (not file name) without a path into the second field, for example 1645.GIF.

To obtain the internal name Oracle Portal has assigned to an image, go to a place within your portal where the image is already in use; right click it; and select **Properties** from the right-click menu.

Note: If you are using item versioning and you always want to show the current version of an image, see [Section 14.12.4, "Images and Item Versioning"](#).

10. If you specified an image for the item, select an image alignment from the **Image Alignment** drop-down list.
See [Table 13–1](#) for descriptions and examples of image alignment options.
11. Click **Finish** to save your changes and return to the page.

13.6.5 Adding a Page Path Item (Breadcrumbs)

The Page Path item ([Figure 13–12](#)) provides a linked trail (or *breadcrumbs*) traveling up the hierarchy of pages that lead to the current page. You can choose the number of levels for the path and the character that separates the path levels.

Figure 13–12 Page Path Item (Breadcrumbs) Separated by Colons

[Sample Page Group](#): [Sample Page](#): [Sample Sub-Page A](#)



To add a Page Path item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item ([Figure 13–13](#)).

Figure 13–13 The Add Item Icon



If the **Add Item** icon does not display next to the region, the region may be a portlet region (and may contain portlets). In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **Page Path** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.
8. On the Item Attributes page, enter the number of hierarchical levels higher than the current page to display in the **Path Levels** field.
Enter 0 to show all levels; enter 1 to show the current level plus one level up; enter 2 to show the current level plus two levels up; and so on. For example, [Figure 13–12](#) shows a path level of 2.
9. In the **Path Element Separator** field, enter a character to separate page levels.
For example, when you enter a colon, the page path item appears as it does in [Figure 13–12](#).
10. Click **Finish** to save your changes and return to the page.

13.6.6 Adding a Portal Smart Link Item

Portal Smart Links provide rapid access to Account Information, Advanced Search, Contact Information, help topics, your portal home page, and the like. They're smart because they automatically provide an address to the target. You do not have to enter a URL. You select the type of Smart Link you want, and Portal Smart Link dynamically constructs the URL to the target.

Portal Smart Link items always work within the context of the containing page. For example, if you add an *Edit* Smart Link to Page A, publish Page A as a portlet, and place the portlet on Page B, clicking the Edit link in the portlet on Page B will render Page B (and not Page A) in Edit mode.

The *Personalize* Smart Link does not display on Portal Templates for items because the dynamically displayed item template pages are not personalizable.

To add a Portal Smart Link item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item ([Figure 13–14](#)).

Figure 13–14 The Add Item Icon

If the **Add Item** icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **Smart Link** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.
8. On the Item Attributes page, select the type of link you will add from the **Portal Smart Link** drop-down list.

Choose one of the following:

- **Account Information** displays a link to the Edit Account Information page.
- **Advanced Search** displays a link to the Advanced Search page.
- **Builder** displays a link to the Portal Builder page.
- **Community** displays a link to the Portal Community main page. The community is part of the Oracle Technology Network (OTN) and includes Portal Studio and Portal Developer Kit (PDK).
- **Contact** displays an e-mail link to the contact for the current page or page group. If the page's contact property does not contain a value, this link does not display.

For a Contact link to work, the user's browser preferences must be properly configured. In Netscape browsers, you can find e-mail settings under Preferences in the Mail & Newsgroups section. In Internet Explorer browsers, you can find e-mail settings under Internet Options on the Programs tab.

- **Edit** enables a user to edit the current page. This link displays only when the user has the appropriate privilege on the page or any of its tabs, or when item level security is enabled on the page or any of its tabs.
- **Favorites** enables rapid addition of the current page to the user's Favorites portlet.
- **Help** displays a link to the Portal help pages.
- **Home** displays a link to the Portal home page.
- **Mobile** displays a link to the current user's mobile customization page. Adding this link allows users to customize their mobile portals. This link should be added only when there is a distinct mobile portal with mobile pages.

- **Navigator** displays a link to the Portal Navigator. This link displays only when the user has the appropriate privilege to view the Navigator.
- **Page Group Home** displays a link to the page group home page.
- **Personal Page** displays a link to the personal page of the currently logged in user.
- **Personalize** enables the user to personalize the current page. This link displays only when the user has the appropriate privilege.
- **Portlet Repository** displays a link to the Portlet Repository page.
- **Portlet Repository Refresh Status** displays the refresh status of the Portlet Repository for the administrator. This link should be used only on pages in the Portlet Repository page group.
- **Property Sheet** displays a link to the property sheet for the page.
- **Refresh Portlet Repository** enables the administrator to refresh the Portlet Repository. This link should be used only on pages in the Portlet Repository page group.
- **Refresh** displays a link that, when clicked, refreshes the page. If caching is not set to *on* for the page definition and page content, this link does not display.
- **Subscribe** displays a link that, when clicked, subscribes a user to the page on which this Smart Link is displayed.

Note: The Subscribe link displays in View mode only when approvals and notifications are enabled for the page group. For more information on approvals and notifications, see [Chapter 20, "Setting Up an Approval Chain"](#).

9. Enter link text in the **Display Name** field, or select **Use the Default Display Name**.

When you enter your own link text, it is not translated. It will be used for all languages. When you select the default display name, it is automatically translated into the current language selection for the page group.

10. Optionally, enter the location of an image.

Click the **Browse** button next to the first field to locate and select an image on your file system. This uploads the image into the portal. Alternatively, use the second field to enter the URL of an image or to reuse an image that has already been uploaded to the portal. To reuse an image, enter its internal name (not file name) without a path into the second field, for example 1645.GIF.

To obtain the internal name Oracle Portal has assigned to an image, go to a place within your portal where the image is already in use; right click it; and select **Properties** from the right-click menu.

Note: If you are using item versioning and you always want to show the current version of an image, see [Section 14.12.4, "Images and Item Versioning"](#).

11. If you specified an image for the item, select an image alignment from the **Image Alignment** drop-down list.

See [Table 13–1](#) for descriptions and examples of image alignment options.

12. Click **Finish** to save your changes and return to the page.

13.6.7 Adding a Portal Smart Text Item

Use Portal Smart Text ([Figure 13–15](#)) to place useful, dynamic information on your pages without having to construct the underlying code to make it work. For example, use the *Current Date* Smart Text item to include the current date on a page. The date advances automatically from day-to-day.

Figure 13–15 *Current Date Portal Smart Text Item*

December 4, 2004

Portal Smart Text items always work within the context of the containing page. For example, if you add a *Current Page* Smart Text item to Page A, publish Page A as a portlet, and place the portlet on Page B, the Current Page Smart Text item in the portlet on Page B will render as *Page B* (rather than *Page A*).

To add a Portal Smart Text item to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the item.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or **Navigation Pages**) heading in the **Layout & Appearance** section, click the link to the page to which to add the item.

This opens the page in Edit mode.

5. Click the **Add Item** icon in the region to which to add the item ([Figure 13–16](#)).

Figure 13–16 *The Add Item Icon*



If the **Add Item** icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

6. On the Item Type Selection page, choose **Smart Text** from the **Built-In Navigation Item Types** list.

Note: If this item type does not appear in the list, contact your page group administrator. The page group administrator selects the item types that are available to the page group.

The Item Type Selection page does not display when the page group is configured to allow the addition of only one type of item. Instead, when users click the Add Item icon, the Item Attributes page is displayed.

7. Click **Next**.

8. On the Item Attributes page, select a Smart Text type from the **Text Type** drop-down list.

Standard types include:

- **Current Date**, which lists today's date and dynamically updates each day
 - **Current User**, which lists the user who logged in to this portal instance
 - **Current Page**, which lists the display name of the current page
9. Click **Finish** to save your changes and return to the page.

13.6.8 Displaying Links to Sub-Pages

Oracle Portal offers a fast way to include a list of links to a current page's sub-pages through Sub-Page Links regions (Figure 13–17). Add one of these regions to a standard or navigation page, and it automatically populates with links to the current page's sub-pages. You can configure the region to show links to one or two levels of sub-pages.

Figure 13–17 Sub-Page Links Region Linking to One Level of Sub-Pages



This section describes how to add a Sub-Page Links region to a page. For information on configuring a Sub-Page Links region, see [Section 10.2, "Configuring Region Display Options"](#). You can use page properties to specify which sub-pages are available for display and the separator to use between the listed pages. For more information, see [Section 7.9, "Defining the Display of Sub-Page Links"](#).

To add a Sub-Page Links region to a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page or navigation page to which to add the region.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under the **Pages** (or Navigation Pages) heading in the Layout & Appearance section, click the link to the page to which to add the region.

This opens the page in Edit mode.

5. Add a region to the page, or use an existing region.

For information on how to add a region, see [Section 10.1.1, "Adding a Region to a Page"](#).

6. Click the **Edit Region** icon (Figure 13–18).

Figure 13–18 Edit Region Icon



7. Select the **Sub-Page Links** radio button under the **Region Type** section.

8. Click **OK** to save your changes and return to the page.

Some of the seeded banners provided with Oracle Portal contain sub-page links. These banners are navigation pages that have been published as portlets. If you prefer to have a sub-page links region on a page in lieu of displaying such links in your banner, you must edit the navigation page to remove its sub-page links region.

13.7 Troubleshooting Navigation Pages

My page banner has a header with the banner's display name. How do I turn this off?

It looks like you need to turn off the portlet headers and borders on the region where the banner is placed. For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

My page portlet is using the style of the target page rather than the style of its source page, as I have specified.

If the style you are noticing applies to colored headers and borders, page portlets always take their header and border colors from the page on which they are placed. This is because the display of headers and borders is controlled on the target page, rather than from any values set for the source page's style.

One way around this is to edit the region in which the page portlet is placed and turn off the display of portlet headers and borders. If the page portlet contains its own portlets, you must also turn off the display of headers and borders for regions on the page portlet's source page.

For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

Portlet background colors usually are specified by the style that is applied to the page on which the portlets are placed. With a page portlet, there is a way to display the source page's background color:

1. Edit the style that is applied to the page on which the page portlet is placed (the target page).
2. For the style element *Portlet Body Color*, remove the value from the **Background Color** field.
3. Click **Apply**.

The background color specified for the page portlet's source page (that is, Background Color property of the Common style element) displays.

To illustrate this for yourself, create a page named *Source* and a page named *Target*. Create a *Source Style* for the Source page and a *Target Style* for the Target page. Set all the color values for Source Style to the red end of the color palette. Set all the color values for Target Style to the blue end of the color palette.

Tip: When you edit styles, a quick way to move from style element property to style element property is to click the style element property in the Preview section of the Edit Style page. This selects the style element property and displays all of its values for editing

Add some portlets and items to the Source and Target pages. Publish the Source page as a portlet. Place the Source page portlet onto the Target page.

For the Source page, experiment with selecting and de-selecting **Use Style Of Page On Which Portlet Is Placed**, and viewing the result on the Target page. Also, experiment with specifying and clearing the value field for the **Background** property of Target Style's **Common** style element.

I do not find an item on the Navigation Item Types list.

For item types to appear on this list, they must be specifically included by the page group administrator who configures that page group. Ask your page group administrator to add the item type you are seeking to the page group's Available Item Types list. For more information, see [Section 5.2.2.3, "Making an Item Type Available to a Page Group"](#).

When I tried to add an item, the Item Type Selection screen did not display as I expected. Instead, the Item Attributes page displayed, allowing me to add only a file-type item.

The page group has been configured to allow the addition of file-type items only. When a page group is configured to allow the addition of only one type of item, the Item Type Selection screen does not display when you click the Add Item icon. Instead, the Item Attributes screen displays, where you can start right in providing attribute values for the one allowed type of item.

Speak with your page group administrator. This is the person who determines the types of items that can be added to a page.

I've added a Smart Link item to my page, but it does not display.

When a Smart Link item does not display, it can be due to one of a few reasons:

- You do not have permission to use the functionality associated with the Smart Link. In this case, ask your page group or portal administrator to give you a higher privilege level on the link's target.
- No value was entered for the page property associated with the Smart Link. In this case, if you have sufficient privilege, edit the page and provide a value for the related property.
- The page group does not have the supporting configuration. For example, in the instance of a *Subscribe* Smart Link, the page group must be configured to allow for approvals and notifications.

What controls are available for sub-page links regions?

Sub-page links regions have controls at the page and region levels.

At the page level, you can choose specific sub-pages to include or omit from display and you can select to display sub-page links alphabetically. These controls are on the Optional tab of page properties. For more information, see [Section 7.9, "Defining the Display of Sub-Page Links"](#).

At the region level, you can specify whether one or two levels of sub-pages display, provide a character to separate pages listed at the secondary sub-page level, select the attributes to display with each sub-page link, and choose the default or another icon that users click to navigate up the sub-page hierarchy. These controls are available when you edit a sub-page link region's properties. For more information, see [Section 10.2.7, "Setting Sub-Page Links Region Properties"](#).

How do I turn off the display of a Sub-Page Links region in my page banner?

If you have edit privileges on the page, you can edit the page, enter Layout view, and edit the defaults of the navigation page being used for the page banner. When you edit

the navigation page's defaults, you can select specific regions for display. For example, you can de-select the region that displays sub-page links.

Part V

Working with Content

Part V contains the following appendixes:

- [Chapter 14, "Working with Items"](#)
- [Chapter 15, "Working with Portlets"](#)
- [Chapter 16, "Working with Search Portlets"](#)
- [Chapter 17, "Protecting Your Content"](#)

Figure 14–1 Portal Content Is Comprised of Portlets and Items



Oracle Portal provides a variety of items for building a useful, dynamic, and compelling company portal. This chapter describes some of those items and provides information on how to add them to your portal pages. It includes the following sections:

- [Section 14.1, "Understanding Items"](#)
- [Section 14.2, "Adding Items to a Page"](#)
- [Section 14.3, "Uploading Multiple Files Simultaneously"](#)
- [Section 14.4, "Editing Items"](#)
- [Section 14.5, "Checking Items Out and In"](#)
- [Section 14.6, "Hiding/Showing an Item"](#)

- [Section 14.7, "Copying Items"](#)
- [Section 14.8, "Moving Items"](#)
- [Section 14.9, "Rearranging the Order of Items"](#)
- [Section 14.10, "Deleting Items and Restoring Deleted Items"](#)
- [Section 14.11, "Expiring Items"](#)
- [Section 14.12, "Using Item Version Control"](#)
- [Section 14.13, "Troubleshooting Item Issues"](#)

Intended Audience

The content of this chapter is intended for users who are logged on as authorized users and who have at least the page privilege *Manage Content*. If a particular task requires a different privilege, the required privilege is listed before the steps of that task.

14.1 Understanding Items

An item is something more than its content. For example, a file item includes the file as well as information about the file, also known as *item attributes*. A file item's attributes can include its display name, author, publish date, expiration date, representative image, display setting, and so on. Each seeded item type includes a set of relevant attributes for which you provide values when you upload content to your portal. These values can be used in content searches to locate items with a particular author, keyword, publish date, classification—any attribute value associated with the item.

You will find a list of the base item types available out of the box from Oracle Portal in [Appendix A, "Oracle Portal Seeded Objects"](#).

Oracle Portal provides many item-related features that support document collaboration among different users and groups. These include:

- **Versioning**—When item versioning is enabled, previous versions of an item are retained instead of being overwritten when the item is edited. This means that you can have a record of all the changes made to an item and can revert to a previous version if necessary. See [Section 14.12, "Using Item Version Control"](#).
- **Item level security**—Item level security enables you to shield unprivileged users from viewing individual items or to grant a higher level of access on an item than might otherwise be granted on the item's containing page. See [Chapter 17, "Protecting Your Content"](#).
- **Document control**—With document control, groups of users can edit items using a check in and check out process. This feature restricts a user from overwriting an item when it is checked out by another user. See [Section 14.4.4, "Enabling Item Check Out"](#).
- **Publish dates**—When an item includes the Publish Date attribute, you can specify the day and time an uploaded item will display to other users. See [Section 14.4.3, "Setting a Publish Date for an Item"](#).
- **Expiry dates**—When an item includes the Expiration Period attribute, you can specify how long an item will display on a page. See [Section 14.11, "Expiring Items"](#).
- **Approvals**—When you are granted the page privilege *Manage Items With Approval*, the items you upload initiate a process that delays publication of the items until they have been approved. See [Chapter 20, "Setting Up an Approval Chain"](#) and [Section 2.7, "Getting Your Content Approved"](#).

14.2 Adding Items to a Page

Oracle Portal comes with many seeded item types, which you can use to add content to your pages. Additionally it provides the capability of developing your own custom item types. The process of adding items to your pages is largely the same from item to item, whether seeded or custom. What differs are the attributes associated with the item type. To highlight some of those differences, this section describes how to add a variety of different item types to a page. It includes the following subsections:

- [Section 14.2.1, "Adding a File Item"](#)
- [Section 14.2.2, "Adding Text to a Page"](#)
- [Section 14.2.3, "Adding a URL Link to a Page"](#)
- [Section 14.2.4, "Adding a Simple Item Link to a Page"](#)
- [Section 14.2.5, "Adding Dynamic Data \(PL/SQL Item\)"](#)
- [Section 14.2.6, "Specifying How Item URLs Are Formed"](#)
- [Section 14.2.7, "Tricks for Adding and Editing Items"](#)

14.2.1 Adding a File Item

When you add a file to a portal page, the display option that you select determines whether the content is displayed in place on the page or as a link. When a link displays, users click it to view item content or to download item content to their local file system.

To add a file-type item:

Note: The item attributes included in this process are the default item attributes for the item. You may be adding a simple or custom version of the item type, in which case, the attributes may vary. That is, some of the attributes included in the following steps will not be present; some that are not included will be.

1. Log in to Oracle Portal.
2. Go to the page to which to add the item.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Go to the region to which to add the item, and click the **Add Item** icon ([Figure 14–2](#)).

Figure 14–2 *The Add Item Icon*



Note: If the Add Item icon does not display next to the region, the region may be a portlet region. You can add items only to an item region.

To add a sub-item to an existing item, click the **Actions** icon (Figure 14-3) next to that item and then choose **Add a subitem**.

Figure 14-3 The Actions Icon



Note: To add sub-items to an item, you must have the at least the item privilege *Edit* on the item.

5. On the Item Type Selection page, select a file-based item type from the **Content Item Types** list.

For example, select *File* or *Simple File*. If the item type does not appear on the list, contact your page group administrator. The page group administrator specifies the types of items available to the page group.

Note: If the page group administrator has configured the page group to allow only one type of item, the Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **File Name** field, enter the path and file name of the item or browse to and select the item.

The file name is case sensitive and must be unique on the page. If the file name is not unique, a value is automatically added to the end of the name. Use up to 126 characters. In addition to character restrictions imposed by your operating system, you cannot use the following characters in the file name:

& # %

Note: For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

8. In the **Display Name** field, enter a display name for the item.
Use up to 256 characters. Use any character, including spaces. When the item displays as a link, the Display Name is the link text that users click to view the item. This field defaults to the file name when no Display Name is specified.
9. From the **Category** drop-down list, select the category that most accurately classifies item content.
10. In the **Description** field, enter a brief description of the item content.

11. In the **Publish Date** field, specify the date on which the item should display to other users.

Use the format: DD-MON-YYYY HH12:MI PM. You will see the item when you edit the page, but no other users (except administrators) will see it until the publish date.

12. Specify an **Expiration Date**:

On the day you specify, the content is marked (in Edit mode) as expired, and is removed from other users' view of the page. If the page group is configured to display expired items, you will still be able to see it in Edit mode and, if you wish, un-expire it, until the portal administrator purges expired items from the portal.

Choose from:

- **Never Expires**—The item does not expire.
 - **Expires In [] Days**—The item expires in the number of days you specify (calculated from the publish date).
 - **Expires On [] (DD-MON-YYYY HH12:MI PM)**—The item expires on the date and time you specify.
13. Click the perspectives you will use to classify this content in the **Available Perspectives** list, then click the **Move** icon that points to the **Displayed Perspectives** list.

In Windows, press and hold the Ctrl key to select two or more perspectives. In UNIX, simply click each perspective.

14. Select an image/icon for the item.

Either:

- Click the **Browse** button to locate and select an image on your file system; or
- Enter the URL or the internal name of a previously uploaded image.

Add images in the JPEG, GIF, or PNG formats.

Any images associated with the item—whether the image is the item itself or an attribute of the item—are affected by item versioning. If you are using item versioning and you always want to show the current version of the image, use the image's durable URL instead of the internal file name. The durable URL always picks up the latest version of the image. For more information, see [Section 14.12.4, "Images and Item Versioning"](#).

You can use settings at the region level to ensure that all image/icons display in a uniform size. For more information, see [Section 10.2.8, "Setting a Uniform Height and Width for Item Icons"](#).

15. Select an image alignment from the **Image Alignment** drop-down list.

Images are aligned relative to the item's Display Name. For illustrations of the image alignment options, see [Table 14-1, "Item Image Alignment Options"](#).

16. In the **Basic Search Keywords** field, enter keywords to assist users in finding this item during a search.

Separate each word with a space, a comma, or some other punctuation mark.

17. In the **Author** field, enter the name of the item's author.

18. Select **Enable Item Check-Out** to enable users to check an item out for individual use.

This prevents other users from overwriting the item while it is checked out. However, page group administrators and page designers can check-in items that have been checked-out by other users.

19. Select the way the item will display from the **Display Options** radio buttons.

Choose from:

- **Link That Displays Item In Full Browser Window**

When users click the item link, the item content displays in the current browser window

- **Link That Displays Item In New Browser Window**

When users click the item link, the item content displays in a new, second browser window.

A third display option, **Item Displayed Directly In Page Area**, is available for some items when you edit the item (though not when you add one). This option displays only when the item is of the type Text, PL/SQL, URL, or File, and only for Files of type text/html or text/plain.

Note: You can use a Portal Template for items only when you select one of the Link display options when you specify item attribute values. The Link display options include Link That Displays Item In Full Browser Window and Link That Displays In New Browser Window. When you select the item display option Item Displayed Directly In Page Area, the Portal Template for items you have associated with the item in page properties or in item attributes is ignored. For more information on Portal Templates for items, see [Chapter 12, "Providing a Standard Look and Feel"](#).

20. Click **Finish** to save your changes and return to the page.

Table 14–1 *Item Image Alignment Options*

Alignment	Description	Example
Left	Aligns the image on the left side of the page.	 Item image alignment This item demonstrates the effect of choosing the Left item image alignment option.
Right	Aligns the image on the right side of the page.	Item image alignment This item demonstrates the effect of choosing the Right item image alignment option. 
Top	Aligns the top of the image with the top of the display name.	 Item image alignment This item demonstrates the effect of choosing the Top item image alignment option.
Bottom	Aligns the bottom of the image with the baseline of the display name. Same as Baseline.	 Item image alignment This item demonstrates the effect of choosing the Bottom item image alignment option.

Table 14–1 (Cont.) Item Image Alignment Options

Alignment	Description	Example
Absolute Middle	Aligns the middle of the image with the absolute middle of the display name.	 Item image alignment This item demonstrates the effect of choosing the Absolute Middle item image alignment option.
Absolute Bottom	Aligns the bottom of the image with the absolute bottom of the display name.	 Item image alignment This item demonstrates the effect of choosing the Absolute Bottom item image alignment option.
Text Top	Aligns the top of the image with the top (tallest text) of the display name.	 Item image alignment This item demonstrates the effect of choosing the Text Top item image alignment option.
Middle	Aligns the middle of the image with the baseline of the display name.	 Item image alignment This item demonstrates the effect of choosing the Middle item image alignment option.
Baseline	Aligns the bottom of the image with the baseline of the display name. Same as Bottom.	 Item image alignment This item demonstrates the effect of choosing the Baseline item image alignment option.
Image Above Link	Aligns the image over the display name.	 Item image alignment This item demonstrates the effect of choosing the Image Above Link item image alignment option.

Adding an Excel Spreadsheet

Before adding an excel spreadsheet you need to do the following:

1. Save your .xls file as Web Page in the **Save As** dialog box.
2. In the **Save As** dialog box, click on **Tools** at the top right corner and select **Web Option**.
3. In the Web Options dialog box, click the **Browsers** tab.
4. Under **Options**, select **Rely on VML for displaying graphics in browsers**.
5. Click **OK**.
6. Click **Save**.

To add the excel file to your Portal, see [Adding a File Item](#).

14.2.2 Adding Text to a Page

Using the Oracle Portal rich text editor, you can add up to 32 KB of plain text, or embedded HTML, to a text-based item on a page. Use text-based items for:

- Browser-based authoring—Text, including HTML, can be added directly to portal pages through the addition of a Text item type. Enter HTML tags to format the content. Alternatively, use the embedded WYSIWYG rich text editor to build the underlying HTML for you.

- In-place display—Text item content can be displayed directly on a portal page. This is useful when you want to add headings, announcements, news summaries, product descriptions, and the like to portal pages.

Note: If the content of your text item includes special characters, such as HTML tags, these characters are escaped before the size of the item is calculated. Therefore, you may find that you unexpectedly reach the 32K limit. <<TODO include list of special characters if possible>>

This section describes how to add text to a page and how to use the Oracle Portal rich text editor. It contains the following subsections:

- [Section 14.2.2.1, "Adding a Text Item"](#)
- [Section 14.2.2.2, "The Rich Text Editor"](#)

14.2.2.1 Adding a Text Item

To add text:

Note: The item attributes included in the following steps are the default item attributes for the item. You may be adding a simple or custom version of the item type, in which case, the attributes may vary. That is, some of the attributes included in the following steps will not be present; some that are not included will be.

1. Log in to Oracle Portal.
2. Go to the page to which to add the item.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Go to the region to which to add the item, and click the **Add Item** icon ([Figure 14-4](#)).

Figure 14-4 The Add Item Icon



Note: If the Add Item icon does not display next to the region, the region may be a portlet region. You can add items only to an item region.

To add a sub-item to an existing item, click the **Actions** icon ([Figure 14-5](#)) next to that item and then choose **Add a subitem**.

Figure 14-5 The Actions Icon



Note: To add sub-items to an item, you must have at least the item privilege *Edit* on the item.

5. On the Item Type Selection page, choose a text-based item type from the **Content Item Types** list.

For example, choose *Text* or *Simple Text*. If the item type you are looking for does not appear in the list, contact your page group administrator. The page group administrator specifies the types of items available to the page group.

Note: If the page group administrator has configured the page group to allow only one type of item, the Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **Text** field, enter text using the Rich Text Editor.

Note: For more information on the Rich Text Editor, see [Section 14.2.2.2, "The Rich Text Editor"](#).

In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

- The text size is limited to 32 KB. Note that HTML tags that are included in the text are included as part of the 32 KB. Note also that the size of the item is calculated after special characters (such as `&`, `"`, `<`, and `>`) are escaped (for example, to `&`, `"`, `<`, and `>`), which also increases the size of the item. If the text is larger than 32 KB, create another text item, or consider putting the text in a file and adding it as a file item.
- To display the current user's name in this item, you can enter the following variables in the Text field:
 - `#USER#`, for the user's name
 - `#USER.FULLNAME#`, for the user's full name
- To include a link to another item or page in the portal, use a relative URL. Using a relative URL means that the link will not break if the portal is moved to a different machine.

For more information about the formation of URLs in Oracle Portal, see [Appendix C, "Formation of URLs in Oracle Portal"](#).

8. In the **Display Name** field, enter a name to display for the item in the portal.

Use up to 256 characters. Use any character, including spaces. If this item is displayed as a link, the Display Name is used as the link text that users click to view the item.

Note: For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

9. From the **Category** drop-down list, select the category that most accurately classifies item content.
10. In the **Description** field, enter a brief description of the item content.
11. In the **Publish Date** field, specify the date on which the item should display to other users.

Use the format: DD-MON-YYYY HH12 :MI PM. You will see the item when you edit the page, but no other users (except administrators) will see the item until the publish date.
12. Specify an **Expiration Date**:

On the day you specify, the content is marked (in Edit mode) as expired, and is removed from other users' view of the page. If the page group is configured to display expired items, you will still be able to see it in Edit mode and, if you wish, un-expire it, until the portal administrator purges expired items from the portal.

Choose from:

 - **Never Expires**—The item does not expire.
 - **Expires In [] Days**—The item expires in the number of days you specify.
 - **Expires On [] (DD-MON-YYYY HH12:MI PM)**—The item expires on the date and time you specify.
13. Select the perspectives you will use to classify this content in the **Available Perspectives** list, and click the **Move** icon that points to the **Displayed Perspectives** list.

In Windows, press and hold the Ctrl key to select two or more perspectives. In UNIX, simply click each perspective.
14. In the **Image** field, specify a image/icon for the item.

Either:

 - Click the **Browse** button to locate and select an image on your file system; or
 - Enter the URL or the internal name of a previously uploaded image.

Add images in the JPEG, GIF, or PNG formats.

Any images associated with the item—whether the image is the item itself or an attribute of the item—are affected by item versioning. If you are using item versioning and you always want to show the current version of the image, use the image's durable URL instead of the internal file name. The durable URL always picks up the latest version of the image. For more information, see [Section 14.12.4, "Images and Item Versioning"](#).
15. Select an image alignment relative to the item display name from the **Image Alignment** drop-down list.

For illustrations of the image alignment options, see [Table 14-1, "Item Image Alignment Options"](#).
16. In the **Basic Search Keywords** field, enter keywords to assist users in finding this item during a search.

Separate each word with a space, a comma, or some other punctuation mark.

17. In the **Author** field, enter the name of the item's author.
18. Select **Enable Item Check-Out** to enable users to check an item out for individual use.

This prevents other users from overwriting the item while it is checked out. However, page group administrators and page designers can check-in items that have been checked-out by other users.

19. Select the way the item will display from the **Display Options** radio buttons.

Choose from:

- **Link That Displays Item In Full Browser Window**

When users click the item link, the item content displays in the current browser window

- **Link That Displays Item In New Browser Window**

When users click the item link, the item content displays in a new, second browser window.

A third display option, **Item Displayed Directly In Page Area**, is available for some items when you edit the item (though not when you add one). This option displays only when the item is of the type Text, PL/SQL, URL, or File, and only for Files of type text/html or text/plain.

Note: You can use a Portal Template for items only when you select one of the *Link* display options when you specify item attribute values. The Link display options include Link That Displays Item In Full Browser Window and Link That Displays In New Browser Window. When you select the item display option Item Displayed Directly In Page Area, the Portal Template for items you have associated with the item in page properties or in item attributes is ignored. For more information on Portal Templates for items, see [Chapter 12, "Providing a Standard Look and Feel"](#).

20. Click **Finish** to save your changes and return to the page.

14.2.2.2 The Rich Text Editor

When you add a text item to a page, Oracle Portal provides a rich text editor for entering WYSIWYG text or HTML source code. This section provides an overview of this editor, including a table that lists and describes all the controls available through the editor. It includes the following subsections:

- [Section 14.2.2.2.1, "About the Rich Text Editor"](#)
- [Section 14.2.2.2.2, "Rich Text Editor Controls"](#)

Note: Consider disabling the rich text editor if you are using a browser that does not support it. Otherwise, the editor may hang or exhibit inconsistent behavior.

Browsers that support the rich text editor include:

- Microsoft Internet Explorer 6.0
- Netscape 7.2
- Mozilla 1.7
- Firefox 1.0

For information on disabling the Oracle Portal rich text editor, see [Section 5.5.5, "Disabling the Rich Text Editor"](#).

14.2.2.2.1 About the Rich Text Editor Starting with the 9.0.4.1 version of Oracle Portal, the rich text editor (WYSIWIG editor) that is used to enter content for text items is much improved. Improvements include:

- Multi-browser support
- Enhanced table editing support
- Additional features, such as Select All, Search and Replace, and Table Cell Properties buttons
- Support for embedded JavaScript in HTML

JavaScript is retained rather than stripped, as happened in earlier versions of the editor. Note that the editor does not execute the JavaScript inside the HTML when it is rendered in the editor in WYSIWYG mode (though the JavaScript does execute at runtime). This means the content you see in the rich text editor might be very different from what is rendered in the browser.

- Support for relative URLs

Now, both absolute and relative URLs are supported. This enables you to refer to an image item using a relative path to the page where the text item is located. That is, when you insert an image with the URL `/images/logo.gif`, the reference remains a relative link and is not converted to an absolute URL (as happened in earlier versions).

- Possibility of extending or replacing the seeded rich text editor

You can customize the Oracle Portal rich text editor to support your needs: from simple changes, for example, replacement of buttons on the editor's toolbar, to more complex changes, for example, replacement of the seeded editor with one of your own.

Such changes involve altering the files that comprise the user interface and functions of the seeded rich text editor. This being the case, this feature is intended for advanced Oracle Portal administrators. Additionally, you should be aware that future upgrades of Oracle Portal may impact any modifications made to these files. Support for this feature is offered through the Portal Content Area discussion forum and not through Oracle Support; consequently, if you have questions, you must take them to the forum and not to Oracle Support. Finally, we strongly advise that you back up the original editor's files before making any modifications, and that you back up modified files.

Note: The Rich text editor ignores the following tags:

- Script tags
 - Form elements such as input, select, textarea, and form.
 - Frame/frameset
 - Document' tags such as html, head, body, meta, and title.
 - Unknown tags sych as <foo></foo>.
-
-

14.2.2.2.2 Rich Text Editor Controls The rich text editor available through Oracle Portal offers two ways to create and modify Web pages:

- WYSIWYG (what you see is what you get) edit mode provides a visual representation of your page.
- HTML edit mode provides a means of modifying the HTML source code.

The functionality listed and described in [Table 14–2](#) is available through the rich text editor toolbar. In your portal, hover your mouse pointer over any toolbar button to view a tool tip with the name of the feature.

Accessibility Note: To navigate out of the editor's text field using the keyboard, you must switch off your screen reader's form mode. (In JAWS, use the Plus key (+) on your numeric keypad to turn form mode off.) Once form mode is off, press the Tab key to change focus to the next HTML element on the page.

Table 14–2 Rich Text Editor Controls

Button/Keystrokes	Mode: WYSIWYG/ HTML/Both	Function
	Both	Cut selected content. Cut content can be re-pasted, provided no other cuts have been performed in the interim.
Ctrl + X		
	Both	Copy selected content.
Ctrl + C		
	Both	Paste content.
Ctrl + V		
	WYSIWYG	Undo last action. Click (or press) again to undo preceding actions.
Ctrl + Z		

Table 14–2 (Cont.) Rich Text Editor Controls

Button/Keystrokes	Mode: WYSIWYG/ HTML/Both	Function
	WYSIWYG	Redo last action. Click (or press) again to perform additional redo's.
Ctrl + Y		
	WYSIWYG	Select the font in which to set the selected or subsequent text. Choose from the fonts available on your file system.
	WYSIWYG	Select a font size in which to set the selected or subsequent text: <ul style="list-style-type: none"> ■ 1 = smallest ■ 7 = largest
B	Both	Bold selected or subsequent text.
Ctrl + B		
<i>I</i>	Both	<i>Italicize</i> selected or subsequent text.
Ctrl + I		
<u>U</u>	Both	<u>Underline</u> selected or subsequent text.
Ctrl + U		
	WYSIWYG	Set the text color.
	WYSIWYG	Set the text background color. This is also called <i>highlighting</i> . The selected color appears behind the text.
< >	Both	Switch between a graphical edit mode (WYSIWYG) and an HTML edit mode. WYSIWYG is the default. Use the WYSIWYG edit mode to display text as it will appear on your page. Use HTML edit mode to modify the HTML source code.
Tools menu: Change Edit Mode		

Table 14–2 (Cont.) Rich Text Editor Controls

Button/Keystrokes	Mode: WYSIWYG/ HTML/Both	Function
	WYSIWYG	<p>Add/change a link. You can create any kind of standard Web link. For example:</p> <ul style="list-style-type: none"> ■ Link to another Web page. Enter the full URL, for example: <code>http://www.oracle.com</code> ■ Link to an e-mail address by entering "mailto:", for example: <code>mailto:info@oracle.com</code>. When users click this type of link, a new, blank e-mail message window opens, addressed to the addressee you enter here, in the current browser's default e-mail application. <p>For a <code>mailto</code> link to work, the user's browser preferences must be properly configured. In Netscape browsers, you can find e-mail settings under Preferences in the Mail & Newsgroups section. In Internet Explorer browsers, you can find e-mail settings under Internet Options on the Programs tab.</p>
	WYSIWYG	Insert a horizontal line.
	WYSIWYG	<p>Insert an image. Use images that are available in your portal.</p> <p>To obtain the image URL to use with this feature:</p> <ol style="list-style-type: none"> 1. Go to the portal page where the image is uploaded. 2. Enter page edit mode. 3. If necessary, edit the region that contains the image to include the Property Sheet attribute. 4. Display the image's property sheet. 5. Copy the URL listed next to the Item Link label in the image's property sheet.
	WYSIWYG	<p>Insert a table. Specify the following table attributes:</p> <ul style="list-style-type: none"> ■ Number of rows ■ Number of columns ■ Border size. Enter a value in pixels. Enter 0 if you do not want a border. ■ Cell padding. Enter a value in pixels to provide space between the cell content and the cell boundary. ■ Cell spacing. Enter a value in pixels to provide space between each cell. ■ Cell width: Enter a value in pixels to define the width of all cells.

Table 14–2 (Cont.) Rich Text Editor Controls

Button/Keystrokes	Mode: WYSIWYG/ HTML/Both	Function
	WYSIWYG	Add or delete a row. Added rows are always placed above the row where the cursor is located.
	WYSIWYG	Add or delete a column. Added columns are placed to the left of the column where the cursor is located.
	WYSIWYG	Edit the following table cell properties: <ul style="list-style-type: none"> ■ Cell width ■ Cell height ■ Text alignment ■ Vertical alignment ■ Background color
	WYSIWYG	Align the current paragraph left, center, or right.
	WYSIWYG	Add/remove a bulleted or numbered list. Once you start a list, every time you press Enter a new bulleted or numbered item is added. Press Enter twice to end the list.
	WYSIWYG	Decrease or increase the current paragraph's indentation. Note: You must use these keys to increase or decrease indents in WYSIWYG mode. Using the Tab key does not indent a paragraph.
	WYSIWIG	Find and replace text within the editor window.

Table 14–2 (Cont.) Rich Text Editor Controls

Button/Keystrokes	Mode: WYSIWYG/ HTML/Both	Function
	WYSIWYG	Select all. This highlights all of the content in the editor window.
Ctrl + P	Both	Print the content in the editor window. Note: Your cursor must be in the editor window for this key combination to have the desired effect.

14.2.3 Adding a URL Link to a Page

You can add a link to another Web page, Web site, or document URL that is internal or external to the page group. To do this, you add a URL item to the page.

You can also add a direct link to an item in your portal by entering the item's path-based or durable URL. See [Section 2.1.3, "Understanding Page and Item URLs"](#).

To add a link to a URL:

Note: The item attributes included in this process are the default item attributes for the item. You may be adding a simple or custom version of the item type, in which case, the attributes may vary. That is, some of the attributes included in the following steps will not be present; some that are not included will be.

1. Log in to Oracle Portal.
2. Go to the page to which to add the item.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Go to the region to which to add the item, and click the **Add Item** icon ([Figure 14–6](#)).

Figure 14–6 The Add Item Icon

Note: If the Add Item icon does not display next to the region, the region may be a portlet region. You can add items only to an item region.

To add a sub-item to an existing item, click the **Actions** icon ([Figure 14–7](#)) next to that item and then choose **Add a subitem**.

Figure 14–7 The Actions Icon

Note: To add sub-items to an item, you must have at least the item privilege *Edit* on the item.

5. On the Item Type Selection page, choose **URL** from the **Content Item Types** list. If the item type you are looking for does not appear in the list, contact your page group administrator. The page group administrator specifies the types of items available to the page group.

Note: If the page group administrator has configured the page group to allow only one type of item, the Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **URL** field, enter the target URL.

Note: When URL items with Display Options set to **Item Displayed Directly In Page Area** are to be rendered on Portal Templates for items, they cannot point to a URL that requires HTTP authentication. Such items rendered as links have no such restriction.

In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

- If you want to add an e-mail link, enter the appropriate HTML code containing the person's e-mail address. For example, remove "https://" from the URL field and enter `mailto:user@company.com`.

For a `mailto` link to work, the user's browser preferences must be properly configured. In Netscape browsers, you can find e-mail settings under Preferences in the Mail & Newsgroups section. In Internet Explorer browsers, you can find e-mail settings under Internet Options on the Programs tab.
- For backward compatibility, the URL item type supports direct access, relative URLs. Users who click the resulting link are redirected to a splash screen that links to the item in the current URL syntax (if the splash screen is enabled, see [Appendix C, "Formation of URLs in Oracle Portal"](#)). Keep in mind that if a URL item is not created with `http://` or `https://` at the beginning, the URL is treated as a relative URL, and not an absolute URL.

To avoid the splash screen and redirection, consider using the Simple Item Link item type to link to objects that are inside your portal. See [Section 14.2.4, "Adding a Simple Item Link to a Page"](#).

For more information about the formation of URLs in Oracle Portal, see [Appendix C, "Formation of URLs in Oracle Portal"](#).

Note: URL-type items that point to locations outside the firewall require a reconfiguration of the Web Cache Manager's proxy server. For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

8. In the **Display Name** field, enter a display name for the item.

This is used for the link text that users click to access the URL item's target. Use up to 256 characters. Use any character, including spaces.

Note: For a summary of the rules governing the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

9. From the **Category** drop-down list, select the category that most accurately classifies item content.
10. In the **Description** field, enter a brief description of the item content.
11. In the **Publish Date** field, specify the date on which the item should display to other users.

Use the format: DD-MON-YYYY HH12:MI PM. You will see the item when you edit the page, but no other users (except administrators) will see it until the publish date.

12. Specify an **Expiration Date**:

On the day you specify, the content is marked (in Edit mode) as expired, and is removed from other users' view of the page. If the page group is configured to display expired items, you will still be able to see it in Edit mode and, if you wish, un-expire it, until the portal administrator purges expired items from the portal.

Choose from:

- **Never Expires**—The item does not expire.
 - **Expires In [] Days**—The item expires in the number of days you specify.
 - **Expires On [] (DD-MON-YYYY HH12:MI PM)**—The item expires on the date and time you specify.
13. Click the perspectives you will use to classify this content in the **Available Perspectives** list, and click the **Move** icon that points to the **Displayed Perspectives** list.

In Windows, press and hold the Ctrl key to select two or more perspectives. In UNIX, simply click each perspective.

14. Select an image/icon for the item; either:

- Click the **Browse** button to locate and select an image on your file system; or
- Enter the URL or the internal name of a previously uploaded image.

Add images in the JPEG, GIF, or PNG formats.

Any images associated with the item—whether the image is the item itself or an attribute of the item—are affected by item versioning. If you are using item versioning and you always want to show the current version of the image, use the image's durable URL instead of the internal file name. The durable URL always

picks up the latest version of the image. For more information, see [Section 14.12.4, "Images and Item Versioning"](#).

15. Select an image alignment relative to the item display name from the **Image Alignment** drop-down list.
For illustrations of the image alignment options, see [Table 14-1, "Item Image Alignment Options"](#).
16. In the **Basic Search Keywords** field, enter keywords to assist users in finding this item during a search.
Separate each word with a space, a comma, or some other punctuation mark.
17. In the **Author** field, enter the name of the item's author.
18. Select **Enable Item Check-Out** to enable users to check an item out for individual use.

This prevents other users from overwriting the item while it is checked out. However, page group administrators and page designers can check-in items that have been checked-out by other users.

19. From the **Display Options** radio buttons, select the way the item will display.

Choose from:

- **Item Displayed Directly In Page Area**
The URL's target content displays in the current browser window.
- **Link That Displays Item In Full Browser Window**
When users click the item link, the item content displays in the current browser window
- **Link That Displays Item In New Browser Window**
When users click the item link, the item content displays in a new, second browser window.

Note: You can use a Portal Template for items only when you select one of the Link display options when you specify item attribute values. The Link display options include Link That Displays Item In Full Browser Window and Link That Displays Item In New Browser Window. When you select the item display option Item Displayed Directly In Page Area, the Portal Template for items you have associated with the item in page properties or in item attributes is ignored. For more information on Portal Templates for items, see [Chapter 12, "Providing a Standard Look and Feel"](#).

20. Click **Finish** to save your changes and return to the page.

14.2.4 Adding a Simple Item Link to a Page

The Simple Item Link item type provides a swift, easy means of linking to existing portal content (such as, a file, text, a URL, an image, and so on) that is contained within the same page group as the link. Using this feature eliminates the need to upload separately-maintained copies of the item. Users click the item link, and the item is rendered on its own in the current browser window.

To add a Simple Item Link:

1. Log in to Oracle Portal.
2. Go to the page to which to add the item.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the Edit link at the top of the page.
This opens the page in **Edit** mode.
4. Go to the region to which to add the item, and click the **Add Item** icon ([Figure 14–8](#)).

Figure 14–8 Add Item Icon

5. Go to the region to which to add the item, and click the **Add Item** icon ([Figure 14–12](#)).

Figure 14–9 The Add Item Icon

Note: If the Add Item icon does not display next to the region, the region may be a portlet region. You can add items only to an item region.

To add a sub-item to an existing item, click the **Actions** icon ([Figure 14–13](#)) next to that item and then choose **Add a subitem**.

Figure 14–10 The Actions Icon

Note: To add sub-items to an item, you must have at least the item privilege *Edit* on the item.

6. On the Item Type Selection page, choose **Simple Item Link** from the **Content Item Types** list.

If the item type you are looking for does not appear in the list, contact your page group administrator. The page group administrator specifies the types of items available to the page group.

Note: If the page group administrator has configured the page group to allow only one type of item, the Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

7. Under **Item Attributes**, click the **Choose Item** icon (Figure 14–11) next to the **Item Link** field.

Figure 14–11 The Choose Item Icon



The **Select an item** page displays.

8. Select an item, either:
 - Under **Search**, search for the item by its Display Name, Author, or Status. Click **Go** to execute the search. Click the item link in the search results to select the item. Click **Reset** to return to the original selection page; or
 - Under **Select an item**, click an item link to select an item or click a page link to drill to an item link on a sub-page.
9. Optionally, in the **Display Name** field enter a display name for the link text.

If you leave this field blank, the Display Name of the referenced item is used. If the referenced item has no Display Name, nothing is used, and there is no apparent link for users to click.
10. Click **OK** to save your changes and return to the page.

14.2.5 Adding Dynamic Data (PL/SQL Item)

Use the following steps to add PL/SQL code that executes a PL/SQL procedure and displays the results on a page.

To add a PL/SQL item to a page:

Note: The item attributes included in this process are the default item attributes for the item. You may be adding a simple or custom version of the item type, in which case, the attributes may vary. That is, some of the attributes included in the following steps will not be present; some that are not included will be.

1. Log in to Oracle Portal.
2. Go to the page to which to add the item.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Go to the region to which to add the item, and click the **Add Item** icon (Figure 14–12).

Figure 14–12 The Add Item Icon



Note: If the Add Item icon does not display next to the region, the region may be a portlet region. You can add items only to an item region.

To add a sub-item to an existing item, click the **Actions** icon (Figure 14–13) next to that item and then choose **Add a subitem**.

Figure 14–13 The Actions Icon



Note: To add sub-items to an item, you must have at least the item privilege *Edit* on the item.

5. On the Item Type Selection page, choose **PL/SQL** from the **Content Item Types** list.

If the item type you are looking for does not appear in the list, contact your page group administrator. The page group administrator specifies the types of items available to the page group.

Note: If the page group administrator has configured the page group to allow only one type of item, the Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **PL/SQL Code** field, enter the PL/SQL code to execute when this item is clicked.

If the PL/SQL code you enter for the item is fairly long, consider putting it into a procedure and calling the procedure using the item.

Note: The PL/SQL code you enter here is not validated when you finish creating or editing the item. Validation is performed when an attempt is made to execute the code. If the code is valid, it executes when the item is rendered. If the code is invalid, error messages are returned. Once you create the item, be sure to test the code.

In the Oracle Portal user interface, an asterisk (*) indicates a field that requires a value.

8. In the **Display Name** field, enter the item's link text.

This is the text that users click to execute the PL/SQL code.

9. Choose a category that describes this item.

10. Enter a **Description** for this item.

11. Change the **Publish Date** default to the date and time to publish the item to other users.

The format is DD-MON-YYYY HH12:MI PM.

When you upload the item, you can see it immediately, despite the **Publish Date** you enter here. Other users will not see this item until the date and time you specify.

12. Select an expiration option from the **Expiration Period** radio buttons.

On the day you specify, the content is marked (in Edit mode) as expired, and is removed from other users' view of the page. If the page group is configured to display expired items, you will still be able to see it in Edit mode and, if you wish, un-expire it, until the portal administrator purges expired items from the portal.

Choose from:

- **Never Expires**—The item does not expire.
- **Expires In [] Days**—The item expires in the number of days you specify (calculated from the publish date).
- **Expires On [] (DD-MON-YYYY HH12:MI PM)**—The item expires on the date and time you specify.

The format is DD-MON-YYYY HH12:MI PM.

13. In the **Perspectives** field, click the **Move** icons to move a perspective from the **Available Perspectives** to the **Displayed Perspectives** list.

Use the Move icons to the right of Displayed Perspectives to set the order in which to display the perspectives.

You can choose more than one perspective for an item. For example, a sales report might belong to both the *Sales Representative* and *Marketing Manager* perspectives. In Windows, select multiple perspectives by pressing and holding the Ctrl key while clicking each perspective. In UNIX, simply click each selection.

14. In the **Image** field, enter the location of the image/icon to associate with this item.

Click the **Browse** button to locate and select the image from your file system. Alternatively, use the second field to enter the URL of an image, or reuse an image that has already been uploaded to the portal. To reuse an uploaded image, enter its internal name (not file name) without a path in this field, for example, enter 1645.GIF.

To obtain the internal name Oracle Portal has assigned to an image, go to a place within your portal where the image is already in use; right click it; and select **Properties** from the right-click menu.

Note: If you are using item versioning and you always want to show the current version of an image, see [Section 14.12.4, "Images and Item Versioning"](#).

15. From the **Image Alignment** list, choose an alignment option for the item's image/icon.

For descriptions and examples of image alignment options, see [Table 14-1, "Item Image Alignment Options"](#).

16. In the **Basic Search Keywords** field, enter one or more search terms for the item.
Separate keywords by spaces, commas, or some other punctuation mark.

17. In the **Author** field, enter the name of the item's author.

18. Select **Enable Item Check-Out** to enable users to check this item into and out of the portal.

Item check-out prevents other users from overwriting an item while it is being edited.

19. In the **Display Options** field, choose a display method for the item.

Choose from:

- **Item Displayed Directly In Page Area** to display the execution results in the portlet region that hosts this item.
- **Link That Displays Item In Full Browser Window** to replace the displayed page with the execution results.
- **Link That Displays Item In New Browser Window** to display the execution results in a second browser window.

Note: You can use a Portal Template for items only when you select one of the Link display options when you specify item attribute values. The Link display options include Link That Displays Item In Full Browser Window and Link That Displays In New Browser Window. When you select the item display option Item Displayed Directly In Page Area, the Portal Template for items you have associated with the item in page properties or in item attributes is ignored. For more information on Portal Templates for items, see [Chapter 12, "Providing a Standard Look and Feel"](#).

20. In the **PL/SQL Execute Options** field, choose the database schema in which to execute this PL/SQL item: the Public schema or another schema that you select.

To select a schema other than the Public schema, click the **Browse Database Schemas** icon next to the **Schema** field. A PL/SQL item is executed by default as the public user. You can also explicitly select a user to execute the item.

21. Click **Finish** to save your changes and return to the page.

14.2.6 Specifying How Item URLs Are Formed

When you add items to a page, you enter values for the item's attributes. You can choose to display those values by editing the attribute settings on the region that contains the item (for more information, see [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#)). Included among the many item attributes you can display are item links that use the item's *durable* URL and item links that use the item's *path-based* URL.

A durable URL is formed using a globally unique identifier (GUID). Because the GUID of an item never changes, the URL continues to be valid if the item name changes.

In contrast, you can also use the item's path-based URL to form the item link. A path-based URL is formed by identifying the path taken through the portal to get to a particular item. This uses page and item names in the URL and thus, if the name of a page or an item within the path is changed, the URL is no longer valid.

Path-based URLs are a little more intuitive, because they follow an observable path through the portal. Durable URLs are a little more sturdy because they can withstand an item name change and still link to the item, and they can be reliably bookmarked.

The attributes of interest include:

- **Link - Display Name**—Path-based URL
- **Link - Display Name (durable)**—Durable URL
- **Link - Image**—Path-based URL
- **Link - Image (durable)**—Durable URL
- **Link - Image and Display Name**—Path-based URL
- **Link - Image and Display Name (durable)**—Durable URL
- **Link - Image OR Display Name**—Path-based URL
- **Link - Image OR Display Name (durable)**—Durable URL

To specify which type of URL to use for an item link, follow the steps provided in [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#). To understand more about URLs in Oracle Portal, see [Appendix C, "Formation of URLs in Oracle Portal"](#). For a detailed explanation of what is rendered for each of these attributes, see [Section A.2, "Base Attributes"](#).

14.2.7 Tricks for Adding and Editing Items

This section provides a couple of tricks to simplify the process of adding content to a region or editing content. It contains the following subsections:

- [Section 14.2.7.1, "Creating a Shortcut to Adding Content"](#)
- [Section 14.2.7.2, "Creating a Shortcut to Editing Content"](#)

14.2.7.1 Creating a Shortcut to Adding Content

When a page is in Edit mode, you click a region's Add Item icon when you want to add an item. The Add Item wizard appears, and, when you've completed the wizard, you click OK and are placed back on the page, still in Edit mode. The new item is in the correct region, and all invalidations needed for the page have been performed.

How can you accomplish this task with the page still in View mode? Add a URL item type that uses a modified version of the Add Item wizard's URL.

Why would you want to? Imagine that you have a site where you provide a catalog of objects. The object list is dynamic, making it a frequent task to add content to the page. Placing an Add Object link on the page could simplify and speed the task of getting into and out of page Edit mode.

To create a shortcut to adding content:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet **Work In** drop-down list, select the page group that owns the page on which to add items.

4. Under **Pages** in the Layout & Appearance section, click the name of the page on which to add items.

This opens the page in Edit mode.

5. Go to the region in which items are typically added, and click the **Add Item** icon (Figure 14–14).

Figure 14–14 The Add Item Icon



This opens the Add Item wizard.

6. In your browser address bar, copy the URL, and click **Cancel** to exit the Add Item wizard.
7. Go to the region in which to add the Add Object link.
8. Click the **Add Item** icon.
9. Select **URL** from the **Content Item Types** drop-down list.
10. Click **Next**.
11. Clear the URL field and paste the Add Item wizard URL you copied in step 6.

Among other things, the URL specifies the region to which content should be added. Another important part of the URL is the `looplink`, which tells the portal where to return to when the Add Item wizard Finish or Cancel button is clicked.

Portal knows whether to show a page in View or Edit mode, depending on whether the page URL is passed a `mode` parameter value. Provided you have the privilege to enter page Edit mode, you can append `?_mode=16` to a portal page's URL to place the page in Edit mode. (This assumes no other parameter values are passed. If other values are passed, you do not need the question mark (?), but you must add an ampersand (&) to append the parameter/value pair to the string of parameters included in the URL, that is, `&_mode=16`.)

Looking at the URL, notice that the `looplink` calls the page back in Edit mode. By removing `%3F_mode%3D16`, you prevent the return to page Edit mode. Instead, you are returned to the page in View mode.

12. Remove `_mode=16` (in our example, `%3F_mode%3D16`) from the `looplink` statement.
13. Enter a **Display Name** for the link.
14. Revise any other item attributes you care to.
15. Click **OK**.

Clicking the new URL item invokes the Add Item wizard, exactly the same as clicking the Add Item icon in Edit mode. And, because the `_mode=16` parameter was removed from the `looplink` URL, users are returned to the page in View mode once they click the wizard's Finish or Cancel buttons.

Should you care to limit the list of users who can perform this action, you could enable item level security and set access rules on the URL item. For information about item level security, see [Section 17.9, "Securing Items"](#).

14.2.7.2 Creating a Shortcut to Editing Content

Using a technique similar to the one described in the previous section, you can use the URL item type along with the URL for the Edit Item wizard to create another shortcut—this one to edit a particular item.

To create a shortcut to edit a specific item:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet **Work In** drop-down list, select the page group that owns the page on which to edit a specific item.
4. Under **Pages** in the Layout & Appearance section, click the name of the page on which to edit a specific item.

This opens the page in Edit mode.

5. Go to the region that contains the item for which to create an edit shortcut, and click the **Edit Item** icon (Figure 14–15).

Figure 14–15 The Edit Item Icon



This opens the Edit Item wizard.

6. In your browser address bar, copy the URL, and click **Cancel** to exit the Edit Item wizard.
7. Go to the region in which to add the Edit Object link.
8. Click the **Add Item** icon.
9. Select **URL** from the **Content Item Types** drop-down list.
10. Click **Next**.
11. Clear the URL field and paste the Edit Item wizard URL you copied in step 6.

Among other things, the URL specifies the item to be edited. Another important part of the URL is the `looplink`, which tells the portal where to return to when the Edit Item wizard Finish or Cancel button is clicked.

Portal knows whether to show a page in View or Edit mode, depending on whether the page URL is passed a `mode` parameter value. Provided you have the privilege to enter page Edit mode, you can append `?_mode=16` to a portal page's URL to place the page in Edit mode. (This assumes no other parameter values are passed. If other values are passed, you do not need the question mark (?), but you must add an ampersand (&) to append the parameter/value pair to the string of parameters included in the URL, that is, `&_mode=16`.)

Looking at the URL, notice that the `looplink` calls the page back in Edit mode. By removing `%3F_mode%3D16`, you prevent the return to page Edit mode. Instead, you are returned to the page in View mode.

12. Remove `_mode=16` from the `looplink` statement (in our example, `%3F_mode%3D16`).
13. Enter a **Display Name** for the link.
14. Revise any other item attributes you care to.
15. Click **OK**.

Clicking the new URL item invokes the Edit Item wizard, exactly the same as clicking the Edit Item icon in Edit mode. And, because the `_mode=16` parameter was removed from the looplink URL, users are returned to the page in View mode once they click the wizard's Finish or Cancel buttons.

14.3 Uploading Multiple Files Simultaneously

Oracle Portal offers a couple of ways to upload multiple files simultaneously:

- You can upload a Zip file as the **Content Item Type** *File*, and make it available to users for downloading multiple files at one time.
- You can upload a Zip file as the **Content Item Type** *Zip File*, and unzip it within your portal for a fast upload of many files. If you wish, you can include their directory structure and, in the case of HTML, preserve their relative links and images.

This section explains how to make use of Zip files in your portal. It includes the following subsections:

- [Section 14.3.1, "Preparing Zip Files for Upload"](#)
- [Section 14.3.2, "Adding a Zip File as a File"](#)
- [Section 14.3.3, "Adding a Zip File as a Zip File"](#)
- [Section 14.3.4, "Extracting a Zip File Within Oracle Portal"](#)

14.3.1 Preparing Zip Files for Upload

You can upload a Zip file as a *File* item type or a *Zip File* item type.

When you upload a Zip file as a *File* item type, users can click the file link to initiate a download to their local systems.

When you add a Zip file as a *Zip File*, you can upload compressed files from your computer to pages in Oracle Portal. Users with the appropriate security privileges can upload compressed files of virtually any size or quantity.

Each extracted file in the Zip file is displayed in the page area as an item link. By creating descriptive file names before zipping files to be uploaded, you can provide meaningful link names to guide users to the file.

Uploaded files are accessible through automatically created links in the page area:

- If you do not include path information in your Zip file, links for the uploaded pages display in a single page that you specify.
To upload files without path information, when you create the Zip file, clear the **Include sub-pages** and **Save Extra Page Info** check boxes in the WinZip application.
- If you include path information in your Zip file, links for each level are displayed in a common page for each level.
To upload path information, when you create the Zip file select **Include sub-pages** and **Save Extra Page Info**. The relative locations of your files when you zip them are the relative locations they have when uploaded.
- If you are uploading an HTML file with a title, the text between the `<TITLE></TITLE>` tags becomes the item's display name link text.

You can associate categories and perspectives with any bulk upload file. Once associated, both categories and perspectives are retained by bulk upload files, even if those files are overwritten with newer files of the same name. However, categories and perspectives are not maintained if item version control is enabled and when the **Create New Version** option is selected for bulk upload files.

14.3.2 Adding a Zip File as a File

When you add a Zip file as a *File* item type, it displays without the **Unzip** link and can be downloaded to your local system. This is useful when you want to make a set of files available for download to other users.

To add a Zip file as a file:

1. Log in to Oracle Portal.
2. Go to the page on which to add a Zip file.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Click the **Add Item** icon in the region in which to add the Zip file ([Figure 14–16](#)).

Figure 14–16 *The Add Item Icon*



Note: If the Add Item icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

5. On the Item Type Selection page choose **File** from the **Content Item Type** list.

Note: If you do not see File in the list, the page group that owns the page may not allow files to be uploaded, or your administrator may not have selected this item type to display here. Contact your page group administrator for more information. If you are the administrator or have administrative privileges, you can click the **configure the list of available item types** link on this page and configure the page group to include the File item type.

If the page group administrator has configured the page group to allow only one type of item, Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **File Name** field, click the **Browse** button to locate and select the file.
8. In the **Display Name** field, enter the item's link text.

This is what users click to view the item.

9. Click **Finish** to upload the Zip file as a file and return to the page.

14.3.3 Adding a Zip File as a Zip File

When you upload a Zip file as a *Zip File* type item, it displays with an **Unzip** link you can click to upload the files to your portal. If directories are preserved through a setting in the WinZip application, they become sub-pages under the page on which you add the Zip file.

To add a Zip file that you will unzip within Portal for bulk page creation and file uploading:

1. Log in to Oracle Portal.
2. Go to the page on which add a Zip file.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Add Item** icon in the region in which to add the Zip file ([Figure 14–17](#)).

Figure 14–17 The Add Item Icon



Note: If the Add Item icon does not display next to the region, the region may be a portlet region. In this case, you cannot add items to this region.

5. On the Item Type Selection page choose **Zip File** from the **Content Item Type** list.

Note: If you do not see Zip File in the list, the page group that owns the page may not allow Zip files to be uploaded, or your administrator may not have selected this item type to display here. Contact your page group administrator for more information. If you are the administrator or have administrative privileges, you can click the **configure the list of available item types** link on this page and configure the page group to include the Zip File item type.

If the page group administrator has configured the page group to allow only one type of item, Item Type Selection page is skipped, and the Item Attributes page is displayed. For example, if the page group is configured to include only file-type items, when a user clicks the Add Item icon, the Item Attributes page for file-type items displays.

6. Click **Next**.
7. On the Item Attributes page, in the **File Name** field, click the **Browse** button to locate and select the file.
8. In the **Display Name** field, enter the item's link text.

This is what users click to view the item.

9. Click **Finish** to upload the Zip file and return to the page.

Item attributes such as Author, Description, Image, New Item Indicator, and so on are available on the Add *<Item>* page only if the item was configured to include them. For more information, see [Chapter 5, "Preparing to Add Content"](#).

14.3.4 Extracting a Zip File Within Oracle Portal

Oracle Portal maintains any directory structure that is included with a Zip file. If the Zip file contains directories, Oracle Portal creates sub-pages during the extraction process, matching each directory with a sub-page. Oracle Portal creates the sub-pages under the page on which the Zip file is being unzipped. The files in a directory are placed on the directory's related portal sub-page.

To extract the content of a Zip file to a page:

1. Log in to Oracle Portal.
2. Add the Zip file to the page as described in [Section 14.3.3](#).
3. Click the **Unzip** link next to the Zip file.
4. Click the **Browse** icon next to the **Target Page** field, and select a page, or a tab on a page, on which to add the Zip file's content.
5. (Optional) Select **Run Unzip In Background** to run the extraction process in the background.

When you clear this check box, you remain on this page until the content of the Zip file had been extracted to the target page. When you select this check box, this page does not display and you can perform other tasks.

Note: If the **Run Unzip in Background** option does not function properly, your system administrator may need to set `JOB_QUEUE_PROCESSES` in the `init.ora` file to a value greater than one.

6. In the **Item Type** section, select the type of items to create for the different types of files in the Zip file.

Note: If items with the same name already exist, and you plan to choose **Overwrite Existing Files** or **Create New Version** in Step 7, the item type of the extracted files will be the same as the existing files, rather than the item type specified here.

For example, you can specify that all of the images in your Zip file will be extracted as File items instead of Image items.

- a. For document files, such as *.doc, *.pdf, or *.htm, select an item type from the **File** list.

When the process is complete, an item of the type you selected is added to the target page for each document file.

Note: The list of item types may include File, Simple File, Zip File, and custom item types based on File item types.

- b. For image files, such as *.gif and *.jpg, select an item type from the **Image** list.

When the process is complete, an item of the type you selected is added to the target page for each image file.

Note: The list of item types may include Image, Simple Image, Simple Image Map, File, Simple File, Zip File, and custom item types based on Image item types.

- c. If your Zip file contains other archive files that do not end with a *.zip extension, such as *.jar files, select an item type from the **Zip File** list.

When the process is complete, an item of the type you selected is added to the target page for each Zip file.

If your Zip file contains other Zip files that do end with a *.zip extension, you do not need to select an item type here. Zip File items will be created automatically for each of the files.

Note: The list of item types may include File, Simple File, Zip File, and custom item types based on Zip File item types.

7. In the **Overwrite Or Rename Files?** section, choose whether to overwrite or rename existing files of the same name on the target page.

If item versioning is enabled at the page level on the target page, the **Create New Version** option displays. Choose this to create a new version of any existing files that have the same name as those files being extracted into the target page.

8. Click **Unzip** to begin the file extraction process.

This process may take several minutes depending on the number and size of the files. Do not extract another Zip file while the extraction process is underway.

If you selected **Run Unzip In Background**, you are returned to the page. If you did not select this option, you remain on the Bulk Load page.

9. After the extraction process is complete, read the **Bulk Load Log** for information on the pages and items created.

If you selected **Run Unzip In Background**, you can access the Bulk Load Log after the extraction process is complete by clicking the **Unzip** link next to the Zip file.

Only Zip files that are added as *Zip File* item types display the **Unzip** link. You cannot extract files from Zip files that are added as *File* or *Simple File* item types.

14.4 Editing Items

Editing an item exposes all of its attributes for revision. You can do anything to these attributes, from providing updated content to revising the publish date or deleting the item's representative image.

Item attributes store information about the item, such as the item's classification, description, or author. The range of attributes available for an item is determined by your page group administrator. See [Section A.2, "Base Attributes"](#) for a list of all the built-in attributes it is possible to associate with a portal object. In addition to these, page group administrators can create their own attributes for storing extra information.

To view/change item attribute values, click the **Edit Item** icon displayed next to the item. Some of the more common item attributes are described in the following sections:

- [Section 14.4.1, "Editing an Item"](#)
- [Section 14.4.2, "Classifying the Content of an Item"](#)
- [Section 14.4.3, "Setting a Publish Date for an Item"](#)
- [Section 14.11, "Expiring Items"](#)
- [Section 14.4.4, "Enabling Item Check Out"](#)

14.4.1 Editing an Item

To edit an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be edited.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit Item** icon next to the relevant item ([Figure 14–18](#)).

Figure 14–18 *Edit Item Icon*



5. Make your changes to the item attributes.

Note: For descriptions of item attributes, see [Appendix A, "Oracle Portal Seeded Objects"](#). For information about attributes related to item versions and translations, see [Section 14.12, "Using Item Version Control"](#). For information about naming rules associated with items, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

6. Click **OK** to save your changes and return to the page.

14.4.2 Classifying the Content of an Item

When you add items to a page it is important to classify their content. This is useful because the details entered here assist users in finding your content and enable them to determine if the item is of interest.

For example, you can apply a category and one or more perspectives to each item and assign keywords that describe the content or purpose of the item.

This section describes how to edit item classifiers. It contains the following subsections:

- [Section 14.4.2.1, "Changing the Category of an Item"](#)
- [Section 14.4.2.2, "Changing the Perspectives of an Item"](#)
- [Section 14.4.2.3, "Changing the Search Keywords for an Item"](#)

14.4.2.1 Changing the Category of an Item

An item can be assigned to one category that classifies the item content. At any time, you can change an item's category.

To change the category of an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be classified.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit** icon beside the item to be classified ([Figure 14–19](#)).

Figure 14–19 The Edit Item Icon



5. Select a category from the **Category** drop-down list.
6. Click **OK**.

14.4.2.2 Changing the Perspectives of an Item

Perspectives describe the audience or interest area for the item. You can change the perspective(s) of an existing item at any time. Unlike categories, you can choose more than one perspective for an item. For example, a sales report might belong to both the *Sales Representative* and *Marketing Manager* perspectives.

To change the perspectives of an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item you will classify with one or more perspectives.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit** icon beside the item to be classified ([Figure 14–20](#)).

Figure 14–20 The Edit Item Icon



5. Use the Move icons to move a perspective from the **Available Perspectives** to the **Displayed Perspectives** list.
In Windows, you can select multiple perspectives by holding the Ctrl key while clicking each perspective. In UNIX, simply click each perspective.
6. Use the Move icons to the right of Displayed Perspectives to set the display order of the perspectives.
7. Click **OK**.

14.4.2.3 Changing the Search Keywords for an Item

An item can be assigned one or more keywords that describe the content, or purpose of the item. When a user performs a search, the user's search criteria is compared to the keywords in items and pages to find a match.

To change search keywords for an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to which to assign keywords.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit** icon beside the item to which to assign keywords ([Figure 14–21](#)).

Figure 14–21 The Edit Item Icon



5. In the **Basic Search Keywords** field, add or change one or more keywords that accurately describe this item.
6. Click **OK**.

14.4.3 Setting a Publish Date for an Item

You can add items to a page in advance, then delay their display to other users until a day and time you specify. For example, you can add a file item for a document that discusses next month's Sales Targets and set a publish date that coincides with the day of the meeting that discusses the targets.

To set publish date details for an item:

1. Log in to Oracle Portal.
2. Add the item to a page.
For information on adding items to pages, see [Section 14.2, "Adding Items to a Page"](#).
3. On the Item Attributes page, go to the **Publish Date** field, and enter the date and time on which this item is to be published to other users.
Use the format DD-MON-YYYY HH12:MI PM; for example:
`12-JAN-2006 01:00 PM`
4. Click **OK**.

14.4.4 Enabling Item Check Out

Item checkout provides document control for items that are managed by multiple users. When a user checks an item out, the item is *locked* and other users cannot overwrite the item. Other users can view the item, but not modify it. With the appropriate privilege, users can copy checked-out items. The copy is automatically checked in.

After the user checks the item in, another user can check the item out and edit it. This prevents users from overwriting each other's changes.

Item check-out is enabled on an item-by-item basis. Consider enabling it for items that are edited by multiple users.

Note: If an item is submitted for approval, the item is automatically checked out so that other users cannot edit it. The item is not checked back in until it is approved or rejected. For more information on the approval process, see [Chapter 20, "Setting Up an Approval Chain"](#).

To enable item check-out:

1. Log in to Oracle Portal.
2. Go to the page that contains the item for which to enable item check-out.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit Item** icon beside the relevant item ([Figure 14–22](#)).

Figure 14–22 The Edit Item Icon



5. Select **Enable Item Check-Out**.
Contact your page group administrator if this option is not available.
6. Click **OK**.

For information on checking items out and into Oracle Portal, see [Section 14.5, "Checking Items Out and In"](#).

14.5 Checking Items Out and In

Item checkout provides document control for items that are managed by multiple users. When a user checks an item out, the item is *locked* and other users cannot overwrite the item. Other users can view the item, but not modify it. With the appropriate privilege, users can copy checked-out items. The copy is automatically checked in.

After the user checks the item in, another user can check the item out and edit it. This prevents users from overwriting each other's changes.

This section contains information on using Oracle Portal's document control feature: item check out and in. It contains the following subsections:

- [Section 14.5.1, "Checking an Item Out"](#)
- [Section 14.5.2, "Checking an Item In"](#)

For information on enabling the check-in/out feature in Oracle Portal, see [Section 14.4.4, "Enabling Item Check Out"](#).

14.5.1 Checking an Item Out

Use item check-out as a means of preventing other users from overwriting an item with their own versions while you are editing the current version.

Note: Page group administrators and page designers can check in items that are checked out by other users.

To check an item out:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be checked out.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon beside the item to be checked out ([Figure 14–23](#)).

Figure 14–23 *The Actions Icon*



5. Click the **Check Out** link.

The item is now checked out. Other users cannot edit the item.

While you have an item checked out, you can edit the item by clicking the Edit Item icon next to item. You can also perform many actions on the item, such as hide, move, copy, and expire. Click the **Actions** icon beside the item to see the list of available actions.

When you have finished working with the item, remember to check it in so it is available to the other users.

Note: If you copy an item when it is checked out, the new copy is checked in.

14.5.2 Checking an Item In

Checking an item in returns it to general use by users who have access to the item. The item can be overwritten by a more current version. And other users can check the item out. For the most part, only a user who has checked an item out can check it back in. There is an exception, however. Page group administrators and page designers can check in items that are checked out by other users.

To check an item in:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be checked in.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Click the **Actions** icon beside the relevant item ([Figure 14–24](#)).

Figure 14–24 The Actions Icon



5. Click the **Check In** link.

The item is now available for other users to edit.

14.6 Hiding/Showing an Item

When you hide an item, users are not able to see the item in View mode; however, they can still see it in Edit mode, where it is clearly marked as *Hidden*.

System Level caching options affect whether a hidden item is visible in the Graphical view of page Edit mode. This is because when the page definition or the fully assembled page content is cached at the system level, the same information is rendered from the same source for all users:

- On pages cached at the user level, hidden items display (as *Hidden*) only to users with a minimum of the page or tab privilege *Manage Content*. Hidden items do not display to other users.
- On pages where the page definition only is cached at the system level, hidden items display (as *Hidden*) to all users.
- On pages cached at the system level for a specified period (expiry caching), hidden items display (as *Hidden*) to all users.

Note: For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

To hide an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be hidden.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Locate the item to be hidden, and click the **Actions** icon beside the item ([Figure 14–25](#)).

Figure 14–25 The Actions Icon



5. Click the **Hide** link.

When you want to show the item, follow these steps, clicking the **Show** link on the Select Action page.

When you copy a hidden item, the copied item is also hidden.

If you want your item to become available on a particular day and the Publish Date attribute is available, consider using this attribute rather than hiding the item. When you set the Publish Date attribute to a future date, the item is hidden until the date you specify. See [Section 14.4.3, "Setting a Publish Date for an Item"](#).

If you are hiding the item because you are still working on its content, consider using the **Enable Item Drafts** feature rather than hiding the item. Items with the status *Draft* are not displayed in View mode until they have been submitted for approval and been approved for display. For more information, see [Section 20.1, "Setting Up an Approval Process for a Page"](#).

14.7 Copying Items

You can create a new item by copying an existing item and editing its attributes. You can make multiple copies of an item and add the copies to various pages. You must have the appropriate privileges on both the page from which you are copying the item, and the page to which you are copying the item.

You can also copy most item types between page groups, with a few exceptions:

- You cannot copy item placeholder item types to a different page group.
- You cannot copy an item that is based on a local type to a different page group. A local type is a custom item type created in a page group other than the Shared Objects page group. Only those items that are based on shared item types can be copied across page groups.
- You cannot copy page function items. This is because such items are based on page types that have specific procedures set up, and those procedures are not included in a copy of a page function item.
- You cannot copy an item to a different page group if a local category or perspective is attached to the item. You must detach the category or perspective from the item, if possible, and then re-attempt the copy.
- You cannot copy an item from a page group with one default language into a page group with another default language. You cannot do this even if the other default language page group is set to the same language as the first page group through the Set Language portlet. Objects can be copied only between page groups sharing a common default language.

When you copy an item, all of its translations are also copied, provided the target page group has the same translations. If the target page group does not have the same translations, only the translations in common between the source and target page groups are copied.

- Copies initiated from WebDAV may fail as *Forbidden* if they do not operate between page groups with the same base translation.
- Items with sub-items in a non-active state cannot be copied until the sub-item is deleted or rendered active. Non-active states include:
 - Pending
 - Pending as new but not current
 - Pending as new and current
 - Draft
 - Rejected

- Rejected and deleted

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

This section describes how to copy single items and multiple items simultaneously. It contains the following sub-sections:

- [Section 14.7.1, "Copying a Single Item"](#)
- [Section 14.7.2, "Copying Multiple Items"](#)

14.7.1 Copying a Single Item

To copy an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be copied.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon beside the item to be copied ([Figure 14–26](#)).

Figure 14–26 The Actions Icon



5. Click the **Copy** link.
6. Select the destination page, and click **Copy Here**.
If necessary, expand the page nodes to access sub-pages. If you are copying the item to a different region on the same page, click the **Copy Here** link next to the current page.
7. Select a destination region for the item, and click **Copy**.

14.7.2 Copying Multiple Items

To copy multiple items:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to be copied.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **List** editing view in the toolbar at the top of the page.
5. Select one or more items to copy.
6. Click the **Copy** button.
7. Click the **Copy Here** link next to the destination page.

If you are copying the items to a different region on the same page, click the **Copy Here** link next to the current page. If necessary, expand the page nodes to access sub-pages.

8. Select a destination region for the items, and click **Copy**.

14.8 Moving Items

You can move items to another page or to another region on the same page. To move an item to another page, you must have the appropriate privileges on both the page you are moving the item from and the page you are moving the item to.

You can also move most item types between page groups, with a few exceptions:

- You cannot move item placeholder item types to a different page group.
- You cannot move an item that is based on a local type (that is a custom item type created in a page group other than the Shared Objects page group) to a different page group. Only those items that are based on shared item types can be moved across page groups.
- You cannot move an item to a different page group if a local category or perspective is attached to the item. You must detach the category or perspective from the item, if possible, and then re-attempt the move.
- You cannot move an item from a page group with one default language into a page group with another default language. You cannot do this even if the other default language page group is set to the same language as the first page group through the Set Language portlet. Objects can be moved only between page groups sharing a common default language.

When you move an item, all of its translations are also moved, provided the target page group has the same translations. If the target page group does not have the same translations, only the translations in common between the source and target page groups are moved.

- Moves initiated from WebDAV may fail as *Forbidden* if they do not operate between page groups with the same base translation.
- You cannot move page function items across page groups. This is because such items are based on page types that have specific procedures set up, and those procedures are not included in a move of a page function item.
- Any sub-items associated with the item being moved are also moved to the new location. However, items with sub-items in a non-active state cannot be moved until the sub-item is deleted or rendered active. Non-active states include:
 - Pending
 - Pending as new but not current
 - Pending as new and current
 - Draft
 - Rejected
 - Rejected and deleted

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

Note: You cannot move items to a region that contains portlets.

This section describes how to move a single item and multiple items simultaneously. It contains the following sub-sections:

- [Section 14.8.1, "Moving a Single Item"](#)
- [Section 14.8.2, "Moving Multiple Items"](#)

14.8.1 Moving a Single Item

To move an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be moved.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon next to the item to be moved ([Figure 14-27](#)).

Figure 14-27 *The Actions Icon*



5. Click the **Move to Another Region** or **Move to Another Page** link.
If you choose to move the item to another page, select the page to which to move the item, and click **Move Here**.
6. Select the region to which to move the item, and click **Move**.

14.8.2 Moving Multiple Items

To move multiple items at once:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to be moved.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **List** editing view in the toolbar at the top of the page.
5. Select one or more items to move.
6. Click the **Move** button.
7. Click the **Move Here** link next to the destination page.
If you are moving all the items to another region on the same page, click the **Move Here** link next to the current page. If necessary expand the page nodes to access sub-pages.

8. Select a target region for the items, and click **Move**.

14.9 Rearranging the Order of Items

You can change the order in which items are displayed in a region.

If items in a region are sorted by title or size, you cannot rearrange them and the Arrange Items icon is not displayed in the region toolbar. To rearrange these items, the page designer or a user with the appropriate privilege must edit the region's properties and select *Default* as the Sort By option.

In all other cases, you can rearrange items that are grouped and items that are not grouped. Grouped items can be rearranged within their groups, and ungrouped items can be arranged within all the items in the region. This section describes both tasks. It includes the following subsections:

- [Section 14.9.1, "Rearranging the Order of Ungrouped Items"](#)
- [Section 14.9.2, "Rearranging the Order of Grouped Items"](#)

14.9.1 Rearranging the Order of Ungrouped Items

To rearrange ungrouped items:

1. Go to the page that contains the items you will rearrange.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
3. In the region that contains the items that you want to rearrange, click the **Arrange Items** icon ([Figure 14–28](#)).

Figure 14–28 *Arrange Items Icon*



4. In the **Arrange Items** list, select an item and use the Move icons to re-order it in relation to the other items in the list. Repeat this step for all items you will rearrange.
5. When you are done, click **OK**.

14.9.2 Rearranging the Order of Grouped Items

To rearrange grouped items:

1. Go to the page that contains the items you will rearrange.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
3. In the region that contains the items that you want to rearrange, click the **Arrange Items** icon ([Figure 14–29](#)).

Figure 14–29 Arrange Items Icon

4. Select the group name from the *<grouping criterion>* drop-down list.
This list displays when the item region is configured to group items by a selected criterion, either category, author, date, or base item type. Use it to select the group-by criterion of the items you want to rearrange.
5. In the **Arrange Items** list, select an item and use the Move icons to re-order it in relation to the other items in the list.
Repeat this step for all items you will rearrange within the selected group.
6. When you are done, click **OK**.
Repeat steps 3 through 6 to rearrange items in other groups.

14.10 Deleting Items and Restoring Deleted Items

This section describes how to delete one item or multiple items simultaneously and how to restore deleted items where possible. It contains the following subsections:

- [Section 14.10.1, "Deleting a Single Item"](#)
- [Section 14.10.2, "Deleting Multiple Items"](#)
- [Section 14.10.3, "Restoring a Deleted Items"](#)

When you delete an item, in some cases it can be restored. Check with your page group administrator before deleting items to see if the restore option **Retain Deleted Items** is selected for the page group. For more information, see [Section 14.10.3, "Restoring a Deleted Items"](#).

Note: When you delete an item that has sub-items, all of the item's sub-items are also deleted. However, items with sub-items in a non-active state cannot be deleted until the sub-item is deleted or rendered active. Non-active states include:

- Pending
- Pending as new but not current
- Pending as new and current
- Draft
- Rejected
- Rejected and deleted

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

When you delete the target of a URL-based item, such as a URL or Page Link item type, be sure to also delete or revise the URL-based item. Otherwise, users will likely see either an error message or a target they had not anticipated when they click the URL-based item.

When you delete an item with the status *Draft*, it is irrevocably deleted from the portal. The only way to restore the item is to add it to the page once again.

14.10.1 Deleting a Single Item

To delete one item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be deleted.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon beside the item to be deleted ([Figure 14–30](#)).

Figure 14–30 The Actions Icon



5. Click the **Delete** link.
6. Click **Yes** to confirm.

The items are removed from View mode, but may still be visible in Edit mode with a status of *Deleted* if the page group setting **Display Unpublished, Expired, and Deleted Items In Edit Mode** is selected. They will be removed entirely at the next system purge. For information on purging expired and deleted items, see [Section 5.5.3.3, "Permanently Removing Expired and Deleted Items"](#).

The expired item no longer displays in View mode. It displays in Edit mode only when the page group setting **Display Unpublished, Expired, and Deleted Items In Edit Mode** is selected.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

14.10.2 Deleting Multiple Items

To delete multiple items simultaneously:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to be deleted.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **List** editing view in the toolbar at the top of the page.
5. Select one or more items to delete.
6. Click the **Delete** button.
7. Click **OK** to confirm.

The items are removed from View mode, but may still be visible in Edit mode with a status of *Deleted* if the page group setting **Display Unpublished, Expired, and Deleted Items In Edit Mode** is selected. They will be removed entirely at the next system purge. For information on purging expired and deleted items, see [Section 5.5.3.3, "Permanently Removing Expired and Deleted Items"](#).

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

14.10.3 Restoring a Deleted Items

Your page group can be set up to retain deleted items in Edit mode and to allow deleted items to be restored. For more information, see [Section 5.5.3.2, "Retaining Deleted Items"](#).

You can restore one item at a time or multiple items simultaneously. This section provides information on restoring files both ways. It contains the following subsections:

- [Section 14.10.3.1, "Restoring One Deleted Item"](#)
- [Section 14.10.3.2, "Restoring Multiple Deleted Items"](#)

If the restore option is not available, check with your page group administrator.

14.10.3.1 Restoring One Deleted Item

To restore a deleted item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be restored.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon next to the item to be restored ([Figure 14–31](#)).

Figure 14–31 The Actions Icon



5. Click the **Undelete** link.

14.10.3.2 Restoring Multiple Deleted Items

To restore multiple deleted items simultaneously:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to be restored.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **List** link in the toolbar at the top of the page.
This displays the page in List view of page Edit mode.
5. Select the check boxes for all the deleted items you want to restore.
6. Click the **Undelete** button next to **Actions**.

The status of any restored item is refreshed to the state it was in before the item was deleted, for example *Active*.

14.11 Expiring Items

You can set an expiration period for an item so that the item automatically expires at the specified time, or you can expire an item instantly.

In some cases, expired items may be restored after the expiration period. For more information, see [Section 14.11.4, "Restoring an Expired Item"](#).

This section describes how to set the expiration details for an item, how to expire one or more items simultaneously, and how to un-expire items. It includes the following subsections:

- [Section 14.11.1, "Setting the Expiration Details for an Item"](#)
- [Section 14.11.2, "Expiring a Single Item"](#)
- [Section 14.11.3, "Expiring Multiple Items Instantly"](#)
- [Section 14.11.4, "Restoring an Expired Item"](#)

Note: If there are multiple versions of an item, all versions expire when the expiration period is reached.

14.11.1 Setting the Expiration Details for an Item

To set expiration details for an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item for which to set an expiration date.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit** icon beside the relevant item ([Figure 14-32](#)).

Figure 14-32 *The Edit Item Icon*



5. In the **Expiration Period** section, choose whether this item is always available, available only for a specified number of days, or if it expires on a certain date and time.

Use the format DD-MON-YYYY HH12:MI PM; for example:

02-DEC-2010 02:02 PM

6. Click **OK**.

14.11.2 Expiring a Single Item

To expire one item instantly:

1. Log in to Oracle Portal.

2. Go to the page that contains the item to be expired.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Actions** icon beside the item to be expired ([Figure 14–33](#)).

Figure 14–33 The Actions Icon



4. On the Select Action page, click the **Expire** link.

The expired item no longer displays in View mode. It displays in Edit mode only when the page group setting **Display Unpublished, Expired, and Deleted Items In Edit Mode** is selected.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

14.11.3 Expiring Multiple Items Instantly

To expire multiple items instantly:

1. Log in to Oracle Portal.
2. Go to the page that contains the items to be expired.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **List** editing view in the toolbar at the top of the page.
5. Select the items that you want to expire, then select **Expire** from the Actions drop-down list.
6. Click **Go**.

The expired item no longer displays in View mode. It displays in Edit mode only when the page group setting **Display Unpublished, Expired, and Deleted Items In Edit Mode** is selected.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

14.11.4 Restoring an Expired Item

Your page group can be set up to display expired items in Edit mode and allow such items to be restored. If the restore option is not available, check with your page group administrator.

To restore an expired item:

1. Log in to Oracle Portal.
2. Go to the page that contains the item to be restored.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Click the **Actions** icon beside the relevant item ([Figure 14–34](#)).

Figure 14–34 The Actions Icon



5. Click the **Un-Expire** link.

You can un-expire multiple items in the List editing view.

14.12 Using Item Version Control

Item versioning makes it possible for multiple versions of an item to exist simultaneously in the Oracle database. This feature is useful for tracking document changes from one version to the next and allows for reverting to a previous version if necessary.

This section discusses using version control with items. It includes the following subsections:

- [Section 14.12.1, "Changing Version Control Settings for an Item"](#)
- [Section 14.12.2, "Changing the Active Current Version of an Item"](#)
- [Section 14.12.3, "Using Your Own Version Numbering Scheme"](#)
- [Section 14.12.4, "Images and Item Versioning"](#)

Oracle Portal provides item version control settings for page groups and for individual pages. Additionally, item versioning is relevant to translations. For more information, see [Section 5.5.2, "Setting the Item Versioning Level for a Page Group"](#), [Section 7.1, "Enabling Item Versioning for Page Groups, Pages, and Templates"](#), and [Section 19.3.2, "Translations and Item Versioning"](#).

Note: With custom item types, you can manually specify the numbering scheme to use for versioning with the Version Number attribute. If you plan to specify a default value for the Version Number attribute, do not use a constant value, such as 2. Because an item cannot have, for example, two version 2s on the same page, providing a static default value for the Version Number field results in an error. Instead, consider creating a default function that returns a unique value and calling the function with a procedure. For more information on adding a procedure call to an item type, see [Section 5.2.2.2.3, "Adding a Procedure Call to an Item Type"](#).

14.12.1 Changing Version Control Settings for an Item

When version control is enabled for items on a page, you can change the version control settings for most items. Exceptions to this include items with a status of either *pending* or *draft*. Such items do not have version control settings.

To change version control settings for an item:

1. Log in to Oracle Portal.
2. Go to the page that contains the items for which to set a versioning level.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit Item** icon beside the relevant item ([Figure 14–35](#)).

Figure 14–35 The Edit Item Icon



5. In the **Item Version Control** radio group, select the item version control option to apply to this item.
 - Simple
 - Add Item As New version, but not as Current Version
 - Add Item As New and Current Version
 - Overwrite Current Version

For the first two options, Oracle Portal maintains a record of the item's previous versions.
 - Audit
 - Add Item As New version, but not as Current Version
 - Add Item As New and Current Version

For both of these options, Oracle Portal maintains a record of the item's previous versions.
6. Click **OK**.

Note: The item version control options change when you are working in a language other than the default language view (a translated view) of the page group or page, Simple or Audit versioning is enabled, and the default-language view has a more-recent version of the item. For more information, see [Section 19.3.3, "Copying Translatable Attributes"](#).

14.12.2 Changing the Active Current Version of an Item

Once you have multiple versions of an item, you may want to change which version of the item is displayed to users.

To change the current version of an item:

1. Log in to Oracle Portal.
2. Go to the page where the item for which to set versioning is located.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Actions** icon next to the relevant item ([Figure 14–36](#)).

Figure 14–36 The Actions Icon

5. Click the **Versions** link.
6. Select the version to use as the current active version, and click **OK**.

The selected version of the item now displays to users. All other versions are maintained in the database and are available for selection as the current version.

14.12.3 Using Your Own Version Numbering Scheme

Using custom item types, you can establish your own version numbering scheme for versions of items that you add to your portal. Every time users update an item, they can manually enter the next version according to your company's version numbering scheme, then save the item as a new version.

If users do not provide a value for the Version Number attribute when they save the item as a new version, Oracle Portal automatically assigns a new value, using the algorithm $\text{ceil}() + 1$. (*Ceil* stands for *ceiling*, which is the next available whole number following a fraction.)

For example, if the last version was 3, then 4 is automatically assigned as the next version. However, if the last version was 3.1, then 5 is automatically assigned as the next version. This is because the ceiling for the number 3.1 is 4, and $4 + 1 = 5$.

Keep in mind that you must use numerals and no other type of character. Additionally, you can use only one decimal point. You can establish a version series, such as 1, 2, 3 or 1.1, 1.2, 1.3, but not 1.1.1 or 1a.

To use your own version numbering scheme:

1. Create a custom item type.

For information on how to create a custom item type, see [Chapter 5, "Preparing to Add Content"](#).
2. Add the **Version Number** attribute to the item type.

Be sure to expose the Version Number attribute in the Add and Edit wizards.
3. Configure the page group to allow the new item type.

For information on how to make an item type available to a page group, see [Section 5.2.2.3, "Making an Item Type Available to a Page Group"](#).
4. Turn on item versioning for the page.

For information on enabling item versioning for a page, see [Chapter 7, "Defining and Displaying Page Information"](#).
5. Add an item of the new custom type to the page.

The Add Item wizard includes the Version Number attribute that you added to the custom item type on which this item is based.

For information on adding an item to a page, see [Section 14.2, "Adding Items to a Page"](#).
6. Provide a numeric value for the **Version Number** attribute.

This value must be an arabic numeral (that is, 1, 2, 3, and so on) and can include one decimal point.

7. Finish adding your item.

When users update the item, the Version Number attribute is exposed in the Edit Item wizard. Users can enter the appropriate incremental value according to your established numbering scheme and save the item as a new version.

14.12.4 Images and Item Versioning

If you are using item versioning and you always want to show the current version of an image—whether the image is the item itself or an attribute associated with the item—use the image's durable URL instead of the internal file name. The durable URL always picks up the latest version of the image. So, instead of entering the image's internal name, for example, `1645.GIF`, enter:

```
/portal/page/<DAD>/<GUID>
```

This is the relative URL format of a durable URL. With values, it looks like the following:

```
/portal/page/mydad/A47D41ECA23648A9E030007F0100118A
```

Always use relative URLs to maintain the integrity of the reference should the host or domain name change, or should the content be exported to another site.

You can obtain the item's durable URL by displaying the Property Sheet attribute in the region hosting the item. Once the Property Sheet attribute is displayed in the region, click the Property Sheet icon (Figure 14–37) next to the item, and copy the portion of the durable URL you will be using. The durable URL is listed next to the heading *Item Link*. For more information about displaying region attributes, see Section 10.2.9, "Changing the Attributes Displayed in a Region".

Figure 14–37 The Item Property Sheet Icon



The property sheet you view when you click the Property Sheet icon is different from the one you view when you right click the image and select Properties from the resulting pop-up menu. To get the image's durable URL, always click the Property Sheet icon.

14.13 Troubleshooting Item Issues

I added a URL item type to my page and configured it to display in place. It returned an error, "Webcache could not access this URL."

This error can occur when the URL points to a location outside the firewall and you elect to display the URL target in place (the display option **Item Displayed Directly In Page Area**). URL-type items that point to locations outside the firewall require a reconfiguration of the Web Cache Manager's proxy server. For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

I tried to unzip a Zip file in the background, but it failed.

If the **Run Unzip in Background** option does not function properly, your system administrator may need to set `JOB_QUEUE_PROCESSES` in the `init.ora` file to a value greater than one.

My page is not displaying all of my items.

An instance where content can be truncated on a portal page is when the containing region allows for a limited number of rows and columns. For example, if a page has eight items and the containing region is set for two columns and three rows, only six of the items display. The remaining two are truncated.

These truncated items display once the region column or row allowances are expanded. For more information, see [Section 10.2.5, "Changing the Number of Columns and Rows in a Region"](#).

Why can't I add content to a region?

You may not have sufficient privileges to add content. You must have at least the page (or tab) privilege *Manage Content* or *Manage Items with Approval* on the page or on the tab that contains the region.

If the page is based on a Portal Template, and the template region is locked, no one can add content to the region, unless they do so through a WebDAV client. If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To unlock a region:

1. Open the page or Portal Template in Edit mode, and edit the region.
2. Select **Enable Users To Included Content In This Region**.
3. Click **OK** to save your changes and return to the page or Portal Template.

The Arrange Items icon does not display.

The containing region's **Sort By** Item Display Option has been set to *Title* or *Size*. When a sorting option is selected, the Arrange Items icon no longer displays on the region in page Edit mode. If you have sufficient privileges, you can edit the region and select *Default* under **Sort By** in the Item Display Options. When *Default* is the Sort By option, privileged users and groups are free to rearrange items.

I want to move/copy an item to another page group, but I'm getting an error that says the category associated with the item does not exist in the destination page group. I created an identical category in the destination page group, but still no joy.

The error indicates that the category associated with the item was created in the item's page group. Creating an identical category in the destination page group does not work, as you have found. The category must instead be common to both by virtue of belonging to the Shared Objects page group.

A quick fix is to edit the item, remove its category classification, and try again. A slightly more involved fix is to move the category to the Shared Objects page group. The moved category retains its association with the item, and the item can be moved between page groups. For information on moving a category to the Shared Objects page group, see [Section 5.3.1.4, "Moving a Category to the Shared Objects Page Group"](#).

I want to move/copy an item to another page group, but I'm getting an error that says the item type does not exist in the destination page group.

This is similar to the previous problem. In this case, the item you are trying to move is based on a type that was created in the item's page group. For an item to be moveable, it must be based on an item type common to all page groups. That is, the item type must come from the Shared Objects page group.

Once an item is created, you cannot change its type. The solution here is to move the item type to the Shared Objects page group. For information about moving item types to the Shared Objects page group, see [Section 4.6, "Sharing Objects Across Page Groups"](#).

I want to enable item check-out, but I do not find that attribute when I edit the item.

It is likely that the item is of a type that does not include the **Enable Item Check-Out** attribute. A user with sufficient privileges on the page group must edit the item type to include the attribute.

Another approach is to delete the item, then add it using an item type you know to include the attribute.

For information on editing item types, see [Section 5.2.2.2, "Editing an Item Type"](#).

I uploaded a draft item and now cannot see it on my page in Pending Items Preview.

When a page or template is cached at the system level, and Approvals and Notifications are enabled for the page group, unpublished items, such as *Draft*, *Pending*, *Rejected*, and *Deleted Rejected* items, are not displayed as expected. For this reason, do not cache approval-enabled pages or templates at the system level. For more information, see [Chapter 21, "Improving Page Performance"](#).

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

The Add Item wizard hangs when I try to add a text item.

It may be that your browser does not support the Oracle Portal rich text editor. When this is the case, the editor may hang or exhibit inconsistent behavior. Consider disabling the rich text editor.

For information on disabling the Oracle Portal rich text editor, see [Section 5.5.5, "Disabling the Rich Text Editor"](#).

Browsers that support the rich text editor include:

- Microsoft Internet Explorer 6.0
- Netscape 7.2
- Mozilla 1.7
- Firefox 1.0

Working with Portlets

Figure 15-1 Portal Content Is Comprised of Portlets and Items



Along with items, portlets are the fundamental building blocks of a portal page. Add them to a page to provide your users with tools to make their experience of your portal meaningful and dynamic. For example, add dynamic charts, tables, or graphs of sales data. Customize Search portlets to automatically serve up content classified under different categories. Keep a list of favorite links always at hand.

This chapter provides information on adding portlets to a page, editing and personalizing portlets, and publishing pages as portlets. It contains the following subsections:

- [Section 15.1, "Adding a Portlet to a Page"](#)
- [Section 15.2, "Arranging Portlets in a Region"](#)
- [Section 15.3, "Editing and Personalizing Portlets"](#)

- [Section 15.4, "Hiding and Showing Portlets"](#)
- [Section 15.5, "Deleting Portlets"](#)
- [Section 15.6, "Moving Portlets to Another Region"](#)
- [Section 15.7, "Sharing a Portlet Across Multiple Pages"](#)
- [Section 15.8, "Troubleshooting Portlet Issues"](#)

Note: For information on working with seeded portlets, see [Section A.5, "Built-in Portlets"](#). For information on custom searches, see [Chapter 16, "Working with Search Portlets"](#). For information on externally published portlets and JavaServer Pages, see [Section 4.5.9, "Enabling JavaServer Page Access to a Page Group"](#).

Oracle Portal provides several caching options to assist page designers and administrators with optimizing the performance of their portal pages, portlets, and templates. To find out more about caching, see [Chapter 21, "Improving Page Performance"](#).

Intended Audience

The content of this chapter is intended for users who are logged on as authorized users and who have at least the page privilege *Manage Content*. If a particular task requires a different privilege, the required privilege is listed before the steps of that task.

15.1 Adding a Portlet to a Page

The steps to add a portlet to a page vary depending on whether you want the portlet to be visible to all users of the page or just to yourself. *Edit* a page for changes other users should see; *personalize* a page for changes for just yourself.

Portlets can be added only to portlet-type regions. Each portlet region on a page may contain one or more portlets. For more information on regions and region types, see [Chapter 10, "Working with Layouts"](#).

Note: To add a portlet to a page, you must have one of the following privileges:

- To add a portlet to the version of a page that everyone sees (*Edit*), you must have the page privilege *Manage Content* (or higher).
 - To add a portlet to your own private version of a page, you must have the page privilege *Personalize Portlets (Add Only)* privilege (or higher).
-
-

To add a portlet to a page:

1. Log in to Oracle Portal.
2. Go to the page on which to add a portlet.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

If you do not see the page that you want to work with, you may not have the appropriate page access privileges. See your page group administrator to gain access.

3. To add a portlet:
 - To the view of the page that all users see, click the **Edit** link to switch to Edit mode.
 - To your own view of the page, click the **Personalize** link to switch to Personalize mode.
4. Click the **Add Portlet** icon in the region in which to add a portlet (Figure 15–2).

Figure 15–2 The Add Portlet Icon



Note: If the region already includes items, you cannot add portlets to the region. If you are personalizing your own version of the page, and there are no existing portlet regions, you may be able to add a tab to the page, then add a portlet to the tab's default portlet region. To add a tab to a page you are personalizing, you must have sufficient privileges on the page, and the page must already have tabs. This is because any tab you add while personalizing a page must be added to an existing tab set. For information on adding tabs to a page, see [Section 10.3.1, "Adding a Tab to a Page"](#).

5. In the Portlet Repository, enter the portlet name in the **Search** field and click **Go**. Alternatively, click the repository links to drill to the portlet's location.
6. To preview a portlet before adding it to your page, click the **Preview** icon next to the name of the portlet.

Note: The **Preview** icon displays only for the portlets that support it.

7. To select a portlet, click the portlet name.
Select one portlet at a time. Multiple selects are not supported.

The order of the portlets in the **Selected Portlets** list reflects the order in which they appear on the page. To change the order, highlight the portlet name and use the **Move** icons to the right of the Selected Portlets list.
8. Click **OK** to return to the page.

15.2 Arranging Portlets in a Region

You can change the order that portlets display in a region. You can change everyone's view of the order (Edit) or just your view (Personalize). This section covers changing everyone's view by editing a region. For information on personalizing a region, see [Section 2.3.2, "Rearranging Portlets in a Page Region"](#).

To rearrange the order of portlets in a region for all users of the page:

1. Log in to Oracle Portal.
2. Go to the page that contains the portlets to be rearranged.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

If you do not see the page you want to work with, you may not have the appropriate page access privileges. Ask your page group administrator to grant access.

3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Click the **Arrange Portlets** icon in the region that contains the portlets to be rearranged (Figure 15–3).

Figure 15–3 The Arrange Portlets Icon



5. In the **Arrange Portlets** list, select a portlet and use the **Move** icons to reposition it in the list.

Repeat this step for all portlets you will rearrange.

6. Click **OK** to save your changes and return to the page.

15.3 Editing and Personalizing Portlets

There are several ways to alter the values that determine to some degree what a portlet contains and how it behaves. This section lists and describes these and explains how to perform editing or personalizing tasks on portlet values. It contains the following subsections.

- [Section 15.3.1, "Comparing Edit Defaults, Edit Instance, and Personalize Portlet"](#)
- [Section 15.3.2, "Editing a Portlet’s Defaults"](#)
- [Section 15.3.3, "Editing a Portlet Instance"](#)
- [Section 15.3.4, "Personalizing a Portlet"](#)

15.3.1 Comparing Edit Defaults, Edit Instance, and Personalize Portlet

When you edit a portlet, you have the opportunity to change values common to all portlets, values specific to the portlet, and values specific to your personal view of the portlet. lists and describes the different methods available for changing portlet values.

Table 15–1 Comparing Edit Defaults, Edit Instance, and Personalize Portlet

Action	How to Invoke	Description
Edit Defaults	<ul style="list-style-type: none"> ■ In Edit page mode Graphical view, click the Edit Defaults icon next to the portlet ■ In Edit page mode Layout view, click the Edit Defaults link next to the portlet. 	<p>Edit values relevant to the particular type of portlet. For example, add or delete favorites from the Favorites portlet, or set the number of objects to display in the Recent Objects portlet.</p> <p>Changes made while editing a portlet display to all users who access the portlet on the page where the changes were made.</p> <p>For information on editing a portlet’s default values, see Section 15.3.2, "Editing a Portlet’s Defaults"</p>

Table 15–1 (Cont.) Comparing Edit Defaults, Edit Instance, and Personalize Portlet

Action	How to Invoke	Description
Edit Instance	In Edit page mode Graphical view, click the Actions icon next the portlet. On the Actions page, click the Edit Portlet Instance link.	<p>Edit values common to all portlets, such as a portlet's name, display option, and cache setting.</p> <p>Changes made while editing a portlet instance display to all users who access the portlet on the page where the changes were made. Additionally, you can share the portlet instance and thereby make changes available to all users who place this particular instance of the portlet on a page.</p> <p>For information about editing a portlet instance, see Section 15.3.3, "Editing a Portlet Instance". For information on sharing a portlet instance, see Section 15.7, "Sharing a Portlet Across Multiple Pages". For information about portlet caching options, see Section 21.3, "Portlet Caching".</p>
Personalize	<p>In View page mode, click the Personalize link in the portlet header. The portlet header must be displayed for the Personalize link to display.</p> <p>For information on displaying portlet headers, see Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders".</p>	<p>Personalize values relevant to the particular type of portlet. For example, add or delete favorites from the Favorites portlet, or set the number of objects to display in the Recent Objects portlet.</p> <p>Changes made while personalizing a portlet display only to the user who personalized the portlet.</p> <p>Many options on the personalize screen are common to those on the Edit Defaults screen. Sometimes there are differences. For example, when you personalize a Recent Objects portlet, you can click the link Clear my list of recent objects. This link does not appear when you edit a portlet's defaults.</p> <p>For information on personalizing a portlet, see Section 15.3.4, "Personalizing a Portlet".</p>

15.3.2 Editing a Portlet's Defaults

Each portlet has its own relevant default settings, which you can use for such tasks as limiting the display capacity of the portlet or changing the portlet's display name. From portlet-to-portlet, the default settings vary, sometimes slightly, and sometimes significantly.

This section describes how to get to any portlet's Edit Defaults screen. For information on editing specific portlet defaults, see [Section A.5, "Built-in Portlets"](#).

To edit a portlet's default settings:

1. Log in to Oracle Portal.
2. Go to the page that includes the portlet to be edited.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link to switch to Edit mode.
4. Click the **Editing Views: Graphical** link in the toolbar at the top of the page.

5. Go to the portlet to be edited, and click the **Edit Defaults** icon next to it (Figure 15–4).

Figure 15–4 The Edit Defaults Icon



6. Make your changes to the portlet’s default settings.
7. Click **OK** to save your changes and return to the page.

15.3.3 Editing a Portlet Instance

A portlet instance is a portlet placed on a portal page. When you edit a portlet instance, you specify how the portlet is cached, displayed, and described. A portlet instance is differentiated from a portlet available in the Portlet Repository by the fact that portal users can personalize and page designers can edit portlet instance default values. You can add multiple instances of the same portlet to a portal page. Every portlet instance can be personalized and edited independently. By sharing a portlet instance, you make the same portlet instance available through the Portlet Repository for page designers to add it to other pages.

When you edit a particular portlet instance, the changes you make apply to everyone’s view of this portlet instance on this particular page. The properties associated with editing a portlet instance are common to all portlets. That is, you will see the same properties for an instance of the Favorites portlet as you will for an instance of the WebClipping portlet. The properties do not have anything to do with what the portlet contains, but rather, how the portlet is cached, displayed, and described.

To edit a portlet instance:

1. Log in to Oracle Portal.
2. From the Page Groups portlet **Work In** drop-down list, select the page group where the portlet instance to be edited is located.
3. In the **Pages** section under **Layout & Appearance**, click the name of the page where the portlet instance to be edited is located.

This opens the page in Edit mode.

4. Click the **Actions** icon (Figure 15–5) next to the portlet instance to be edited.

Figure 15–5 The Actions Icon



5. On the resulting Actions page, click the **Edit Portlet Instance** link.
6. In the **Name** field, enter a name for this instance of the portlet.

The name must be unique within the portlet’s host page.

Note: An asterisk (*) indicates a field that requires a value.

7. In the **Display Name** field, enter a name to display with this portlet instance. If no value is entered, this field defaults to the entry in the Name field.
8. Specify the Display Options for the portlet instance. Choose from:

- **Portlet Displayed Directly In Page Area**

The portlet displays directly on the host page. If you choose this option, you can also choose whether to limit the portlet height:

Limit Portlet Height to n Pixels

Select the check box and enter a value (in pixels) in the field to control how much vertical space the portlet will be allowed to occupy. If the value is set lower than the required display height, a scroll bar displays, enabling users to scroll up and down the portlet instance.

- **Link That Displays Portlet In Full Browser Window**

A link to the portlet displays on the host page. Users click the link, and the current browser window is refreshed to display the portlet.

For this link to display, you must edit the host region's attribute settings to include the display of the **Link - Display Name** or **Link - Display Name (durable)** attribute. To edit the host region's attribute settings:

- While you are still in Edit mode, click the Edit Region icon ([Figure 15–6](#)) for the portlet region hosting the portlet instance.

Figure 15–6 Edit Region Icon



- On the resulting page, click the **Attributes** tab to bring it forward.
- **Select Attributes** should be selected. If **Use HTML Content Layout** is selected, then these steps do not apply. For more information on HTML content layouts, see [Section 12.3, "Working with HTML Templates"](#).
- Under Available Attributes, select **Link - Display Name** or **Link - Display Name (durable)** and move it to Displayed Attributes.
- Click **OK** to save this change and return to the page.

- **Link That Displays Portlet In New Browser Window**

A link to the portlet displays on the host page. Users click the link, and a new browser window opens to display the portlet instance.

For this link to display, you must edit the host region's displayed attributes to include the display of the **Link - Display Name** or **Link - Display Name (durable)** attribute. For more information, see the previous bullet.

9. In the Portlet Caching section, specify how this portlet is cached.

For information on portlet caching options, see [Section 21.3.2, "Portlet Caching Options"](#).

10. In the Portlet Caching Level section, specify a caching level for this portlet instance.

The level that you choose is the effective level of caching for this portlet instance. Under some circumstances, this section is not available. For more information, and for information on portlet caching level options, see [Section 21.3.3, "Portlet Caching Level Options"](#).

11. In the Description field, enter a description of the portlet instance.

12. From the Category drop-down list, select one category to classify the portlet instance.

13. Select one or more perspectives in the **Available Perspectives** list, and move them to the **Displayed Perspectives** list.
Click the Move icon to move your selection. To make multiple selections, in Windows, hold down the Ctrl key and click each selection; in UNIX, click one or more perspectives.
14. Click **OK** to save your changes and return to the page.

15.3.4 Personalizing a Portlet

When you personalize a portlet, you change only your view of the portlet. Other users do not see your personalizations.

Many options on the personalize screen are common to those on the Edit Defaults screen. Sometimes there are differences. For example, when you personalize a Recent Objects portlet, you can click the link **Clear my list of recent objects**. This link does not appear when you edit a portlet's defaults.

This section describes how to access the personalization options on a portlet. Because these options vary from portlet to portlet, specifics about these settings are not covered here. You can find information about specific portlet personalization in [Appendix A in Section A.5, "Built-in Portlets"](#).

To personalize a portlet:

1. Log in to Oracle Portal.
2. Go to the page that contains the portlet to be personalized.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. In View mode, click the **Personalize** link in the portlet's header.

The header is a bar of color that forms the top border of a portlet. If the portlet does not display a header, this means its containing region is not configured to display portlet headers. For more information on displaying portlet headers, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

4. Make your changes to the portlet personalization options.
5. Click **OK** to save your changes and return to the page.

Alternatively, click **Reset to Defaults** to reset the portlet to its default settings. Or click **Apply** to save your changes but remain on the portlet personalization page.

15.4 Hiding and Showing Portlets

In some situations, you may want to hide one or more portlets from view. For example, you may want to continue work on a portlet before you make it available to other users. You may want to hide a portlet in just your view of a page. When you hide a portlet by editing a page, other users are not able to see the portlet in View mode; however, you can still access it in Edit mode. When you hide a portlet while personalizing a page, the portlet is hidden in View mode of just your view of the page.

System level caching options affect whether a hidden portlet is visible in the Graphical view of page Edit mode. This is because when the page definition or the fully assembled page content is cached at the system level, the same information is rendered from the same source for all users:

- On pages cached at the user level, hidden portlets display (as *Hidden*) only to users with a minimum of the page or tab privilege *Manage Content*.
- On pages where the page definition only is cached at the system level, hidden portlets display (as *Hidden*) to all users.
- On pages cached at the system level for a specified period (expiry caching), hidden portlets display (as *Hidden*) to all users.

For information about user and system level caching, see [Chapter 21, "Improving Page Performance"](#).

This section describes how to hide portlets by editing a page. It describes how to hide a single portlet and how to hide multiple portlets simultaneously. It contains the following subsections:

- [Section 15.4.1, "Hiding a Single Portlet"](#)
- [Section 15.4.2, "Hiding Multiple Portlets Simultaneously"](#)

For information on hiding portlets while personalizing a page, see [Section 2.3.4, "Hiding a Portlet on a Page"](#).

Note: If a portlet is not hidden, it is displayed in View mode to all authorized users and available to all public users if the page is enabled to display to public users.

15.4.1 Hiding a Single Portlet

To hide a single portlet in View mode:

1. Log in to Oracle Portal.
2. Go to the page that includes the portlet to be hidden.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click **Edit** to switch to **Edit** mode.
4. Click the **Actions** icon beside the portlet to be hidden ([Figure 15–7](#)).

Figure 15–7 The Actions Icon



5. Click **Hide** to hide the portlet and return to your page.

To show a hidden portlet, repeat these steps, clicking **Show** instead.

15.4.2 Hiding Multiple Portlets Simultaneously

When you want to hide multiple portlets simultaneously, you do so through the Layout view of Edit page mode.

To hide multiple portlets simultaneously:

1. Log in to Oracle Portal.
2. Go to the page that includes the portlets to be hidden.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click **Edit** to switch to **Edit** mode.
4. In the toolbar at the top of the page, click **Editing Views: Layout**.
This places you in Layout view of page edit mode.
5. Select each portlet to hide by clicking the check box next to it.
6. Click the **Actions: Hide** button.

To show all the hidden portlets, repeat these steps, clicking **Show** instead.

15.5 Deleting Portlets

You can delete a portlet from your personal view of a page (Personalize) or from everyone's view of the page (Edit). This section covers deleting from everyone's version of the page. It contains the following subsections:

- [Section 15.5.1, "Deleting One Portlet"](#)
- [Section 15.5.2, "Deleting Multiple Portlets Simultaneously"](#)

For information on personalizing, see [Section 2.3.5, "Removing a Portlet from a Page"](#).

15.5.1 Deleting One Portlet

To delete a portlet from a page for all users of the page:

1. Log in to Oracle Portal.
2. Go to the page that hosts the portlet to be deleted.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

If you do not see the page you want to work with, you may not have the appropriate page access privileges. Ask your page group administrator to grant access.

3. Click the **Edit** link at the top of the page to switch to Edit mode.
4. Click the **Actions** icon beside the portlet to be deleted ([Figure 15–8](#)).

Figure 15–8 The Actions Icon



5. Click the **Delete** link.
6. On the confirmation page, click **Yes** to delete the portlet and return to the page.

15.5.2 Deleting Multiple Portlets Simultaneously

To delete multiple portlets simultaneously:

1. Log in to Oracle Portal.
2. Go to the page that includes the portlets to be hidden.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Click **Edit** to switch to **Edit** mode.
4. In the toolbar at the top of the page, click **Editing Views: Layout**.

This places you in Layout view of page edit mode.

5. Select each portlet to delete by clicking the check box next to it.
6. Click the **Actions: Delete** button.
7. On the confirmation screen, click **Yes**.

15.6 Moving Portlets to Another Region

You can move one or more portlets to another region on the same page. You can do this so that it affects everyone's view of the portlets (Edit) or just your view (Personalize).

This section covers editing a region and making moves that affect everyone's view. It contains the following subsections:

- [Section 15.6.1, "Moving a Single Portlet"](#)
- [Section 15.6.2, "Moving Multiple Portlets Simultaneously"](#)

This section covers moving portlets while editing a region. For information on moving portlets while personalizing a region, see [Section 2.3.3, "Moving Portlets to Different Regions/Tabs"](#).

15.6.1 Moving a Single Portlet

To move a portlet to another region for all users of the page:

1. Log in to Oracle Portal.
2. Go to the page that contains the portlet to be moved.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

If you do not see the page you will work with, you may not have the appropriate page access privileges. Ask your page group administrator to grant access.

3. Click the **Edit** link at the top of the page.

This opens the page in Edit mode.

4. Click the **Actions** icon next to the portlet to be moved ([Figure 15–9](#)).

Figure 15–9 The Actions Icon



5. Click the **Move to another region** link.
6. Select a new region, and click **Move Portlet**.

The portlet is moved, and you are returned to the page.

15.6.2 Moving Multiple Portlets Simultaneously

When you want to move multiple portlets simultaneously, you can do so through Layout view of page Edit mode. All portlets moved simultaneously are placed in the same region. That is, you cannot select multiple portlets to move, then select a different target region for each.

To move multiple portlets simultaneously:

1. Log in to Oracle Portal.
2. Go to the page that includes the portlets to be moved.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click **Edit** to switch to **Edit** mode.
4. In the toolbar at the top of the page, click **Editing Views: Layout**.
This places you in Layout view of page edit mode.
5. Select each portlet to move by clicking the check box next to it.
6. Click the **Actions: Move** button.
7. On the resulting page, select the region to which to move the portlets, and click the **Move Portlet** button.

15.7 Sharing a Portlet Across Multiple Pages

When a portlet is added to a page, a portlet instance is created that stores information about that particular instance of the portlet. This includes information about changes made to the portlet. You can share a portlet instance so that the exact same portlet (including all of your changes) can be used on another page. This means that when a user personalizes the portlet instance on a page, those personalizations are reflected on all other pages that include the shared portlet instance. Users do not have to make the same personalizations to multiple instances of the same portlet.

For example, there are two versions of the same page: a standard page for use on desktop machines and a mobile page for use on mobile devices. You could share the portlets on the standard page and then add those shared portlet instances to the mobile page. That way, the user just needs to personalize the portlets on the standard page, and those same personalizations will automatically apply to the portlets on the mobile page.

You can share only portlets; you cannot share items or tabs. Should you try to share a non-sharable object, Oracle Portal will return an error.

This section describes how to share one or multiple portlets simultaneously and how to add a shared portlet instance to a page. It contains the following subsections:

- [Section 15.7.1, "Sharing One Portlet"](#)
- [Section 15.7.2, "Sharing Multiple Portlets"](#)
- [Section 15.7.3, "Adding a Shared Portlet Instance to a Page"](#)

15.7.1 Sharing One Portlet

To share a single portlet:

1. Log in to Oracle Portal.
2. Go to the page that hosts the portlet to be shared.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page to switch to Edit mode.
4. Click the **Actions** icon next to the portlet to be shared ([Figure 15–10](#)).

Figure 15–10 The Actions Icon

5. Click the **Share Instance** link.
6. On the confirmation page, click **Yes** to share the portlet instance and return to the page.

In Edit mode, the text *Shared* appears next to the portlet.

15.7.2 Sharing Multiple Portlets

To share more than one portlet:

1. Go to the page that hosts the portlets you will share.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Click the **Edit** link at the top of the page to switch to Edit mode.
3. Go to **Editing Views** in the toolbar at the top of the page and click the **Layout** link.
4. Select the check box next to all the portlets that you will share.
5. Click **Share**.
6. Click **Yes** in the confirmation page to share the portlets you have selected and return to the page.

15.7.3 Adding a Shared Portlet Instance to a Page

To add a shared portlet instance to a page:

1. Log in to Oracle Portal.
2. Go to the page on which to add a shared portlet instance.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page to switch to Edit mode.
4. Click the **Add Portlet** icon in the region to which to add the shared portlet instance ([Figure 15–11](#)).

Figure 15–11 The Add Portlet Icon

5. Click the **Shared Portlets** link in the Portlet Repository.

Note: By default, shared portlet instances are located in the **Shared Portlets** page of the Portlet Repository. Your Oracle Portal administrator may have relocated shared instances. If so, either search for the name of the shared portlet instance, or ask your portal administrator for the new location.

6. Click the portlet name to add it to the **Selected Portlets** list.
7. Click **OK** to return to the page.

When you create a mobile page, if you base the page on an existing page, any portlets on the existing page are automatically shared with the mobile page. However, new portlets are not implicitly shared between a mobile page and the page on which it was based. If you add a portlet to a page that was used as the starting point for a mobile page, that portlet will not appear on the mobile page. If you want the portlet to also appear on the mobile page, you must add it to the mobile page. Additionally, if you want to share any personalizations made to the portlet between the two pages, you must explicitly share the portlet on one page, and then add that shared portlet instance to the other page.

If you want users to add a shared portlet instance to a page rather than the portlet itself, make sure access privileges in the Portlet Repository are set up appropriately.

15.8 Troubleshooting Portlet Issues

Why can't I add content to a region?

You may not have sufficient privileges to add content. You must have at least the page (or tab) privilege *Manage Content* or *Manage Items with Approval* on the page or on the tab that contains the region.

If the page is based on a Portal Template, and the template region is locked, no one can add content to the region, unless they do so through a WebDAV client. If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To unlock a region:

1. Open the page or Portal Template in Edit mode, and edit the region.
2. Select **Enable Users To Included Content In This Region**.
3. Click **OK** to save your changes and return to the page or Portal Template.

My page portlet is using the style of the target page rather than the style of its source page, as I have specified.

Page portlets always take their header and border colors from the page on which they are placed. This is because the display of headers and borders is controlled on the target page, rather than from any values set for the source page's style.

One way around this is to edit the region in which the page portlet is placed and turn off the display of portlet headers and borders. If the page portlet contains its own portlets, you must also turn off the display of headers and borders for regions on the page portlet's source page.

For information on turning off region headers and borders, see [Section 10.2.12, "Displaying or Hiding Portlet Headers and Borders"](#).

Portlet background colors usually are specified by the style that is applied to the page on which the portlets are placed. With a page portlet, there is a way to display the source page's background color. Edit the style that is applied to the page on which the page portlet is placed (the target page). For the style element Portlet Body Color, remove the value from the Background Color field, and click Apply. The background color specified for the page portlet's source page (that is, Background Color property of the Common style element) displays.

To illustrate this for yourself, create a page named *Source* and a page named *Target*. Create a *Source Style* for the Source page and a *Target Style* for the Target page. Set all the color values for Source Style to the red end of the color palette. Set all the color values for Target Style to the blue end of the color palette.

Tip: When you edit styles, a quick way to move from style element property to style element property is to click the style element property in the Preview section of the Edit Style page. This selects the style element property and displays all of its values for editing

Add some portlets and items to the Source and Target pages. Publish the Source page as a portlet. Place the Source page portlet onto the Target page.

For the Source page, experiment with selecting and de-selecting **Use Style Of Page On Which Portlet Is Placed**, and viewing the result on the Target page. Also, experiment with specifying and clearing the value field for the **Background** property of Target Style's **Common** style element.

My page portlet is not using the style of the container page, as I specified.

When you publish a page as a portlet, you are given the opportunity to use the source page's style or to use the style of the containing page. Using the style of the containing page works in most cases. The exception is when the source page is provided through the Federated Portal Adapter. In such cases, the setting to use the style of the containing page is ignored. The page portlet uses whatever style is applied to its source.

I published a page as a portlet, placed it on a page, and displayed selected regions. Now it is displaying blank.

This involves the source page and a Portal Template. When you edit or personalize the Page portlet to display selected regions, and a change is made to the portlet's source page regarding the template—either a template is added or detached or a template region equivalent to a region selected for display on the portlet is deleted—the portlet cannot resolve such changes with its Display Selected Regions setting. The result is that the portlet displays without content—or blank. To resolve this situation, re-edit or personalize the portlet's region display settings.

To personalize a portlet, in page View mode click the Personalize link in the portlet header. For more information on restricting the display of regions in a page portlet, see [Section 8.5.3, "Selecting Page Portlet Regions for Display"](#).

I added a portlet to a page in Edit mode, and it does not display in View mode.

Is the portlet or its container page cached at the system level? Portlets cached at the system level display only Public content. If the objects displayed in the portlet are not public, they do not display. Typically, whether or not these objects display is dependent on a user's level of privilege on the objects.

If you have sufficient privileges, edit the page or edit the portlet instance, and change the caching option to non-system-level caching. Page caching options are located on the Main tab of page properties. Portlet instance caching is available by clicking the Actions icon next to the relevant portlet in page Edit mode.

My Page portlet/navigation page is using the background color of the container page, rather than the source page, as I prefer.

To ensure that a page portlet or navigation page uses its own background color, rather than the one specified for the page it is placed on:

1. Ensure that the page portlet or navigation page uses its own style when it is published as a portlet (that is, do not select this option for the page or navigation page that you are using as a portlet).

2. In the style that is used by the target page (that is, the page where you place the page portlet or navigation page), set Portlet Body Color style element to Null (no value).

I collapsed my portlet, but now it's restored.

Some users have a high enough privilege level to suppress the display of the Collapse/Restore icon on a portlet header. Once the icon display is suppressed, all instances of collapsed portlets on the affected page are restored automatically to prevent them from being stuck in a permanently collapsed state.

Should the privileged user reinstate the display of the Collapse/Restore icon on the portlet, all portlet instances are reset to the state they were in before icon display was suppressed.

How can I remove the "decoration"—the graphics and links—at the top of the portlet edit and personalize screens?

Look for the `_decoration=true` parameter in the portal URL, and change the value to `_decoration=false`. If the portal URL does not contain the `_decoration` parameter, append it to the end of the URL as `&_decoration=false`.

This parameter is useful with the Portal Developer Kit (PDK) when you want to develop a portlet that does not use these links and decorations.

Read about PDK on the portlet development page on the Oracle Technology Network, http://www.oracle.com/technology/products/ias/portal/portlet_development_10g1014.html.



Working with Search Portlets

This chapter explains how to use Oracle Portal's search portlets. It includes the following subsections:

- [Section 16.1, "Understanding Search Options in Oracle Portal"](#)
- [Section 16.2, "Working with Basic and Advanced Search Portlets"](#)
- [Section 16.3, "Working with the Custom Search Portlet"](#)
- [Section 16.4, "Troubleshooting Search Functionality"](#)

Intended Audience

The content of this chapter is intended for users with at least the *Manage* privilege on the pages you will work with. If a particular task requires or can be performed under different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges"](#).

16.1 Understanding Search Options in Oracle Portal

Oracle Portal offers a number of options for adding search engines to your pages. You can add one of the pre-built search portlets (Basic, Advanced, Custom) or the Oracle Secure Enterprise Search Secure portlet. A basic search matches results with search criteria entered into the Search field. An advanced search is a basic search with additional capabilities, such as the ability to limit the search to a specific page group, page, category, and so on.

The Custom Search portlet has a variety of uses. Page designers can create an automatically executed search whose results dynamically populate a search results page, or create custom search forms and custom results pages for a specific customer or user requirement.

For custom searches, you can display search results in the same portlet you used to enter the search criteria, or you can place two Custom Search portlets on two different pages—one for entering search criteria and one for displaying results. This has implications for the set-up values specified for each portlet, see [Section 16.3.8, "Defining Separate Portlets for Search Forms and Search Results"](#).

A pre-built Oracle Secure Enterprise Search Secure portlet is also available. This portlet provides crawling and universal search over all Oracle Secure Enterprise Search-supported repositories and this includes the ability to search content in Oracle Portal. To make use of the pre-built portlet, Oracle Portal must be registered as an Oracle Secure Enterprise Search content source, and the Oracle Secure Enterprise Search provider must be registered with Oracle Portal.

Note: For more information on how to set up Oracle Secure Enterprise Search, see *Oracle Secure Enterprise Search Administrator's Guide* available from the Oracle Technology Network at:

<http://www.oracle.com/technology/documentation/ses.html>

16.2 Working with Basic and Advanced Search Portlets

When you place a Basic or Advanced Search portlet on a page, you can edit some default portlet settings, including the portlet's header title and whether a page group selector is displayed. The page group selector allows users to limit their search to one or more specific page groups.



This section discusses the options that are set at the portlet level. You'll find information about setting options at the administrator level in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

To edit a Basic or Advanced Search portlet:

1. Go to the page where you will add the Basic or Advanced Search portlet.
2. Switch to **Edit** mode.
3. Click the **Add Portlet** icon in the region where you will add the portlet.
If the region already includes items, you cannot add a portlet to the region.
4. In the Portlet Repository, enter search in the **Search** field, and click **Go**.
5. In the **Portlet Repository Search Results** list, click **Basic Search** or **Advanced Search**.
6. Click **OK**.
7. Click the **Edit Defaults** icon associated with the portlet.
8. Change defaults as desired:
 - Enter a different **Display name**. The default is **Basic Search** or **Advanced Search**.
 - Select **Show Page Group Selector** to enable users of this search portlet to choose which page groups are included in a search. Once this option is selected, a **Page Groups** field displays in the portlet. Users click the **Browse** icon next to this field to select one or more page groups.
If this option is not selected, all page groups are searched.
9. Click **OK** to save your changes and return to the page.

Note: When you *edit* a portlet, for example, through **Edit Defaults**, you make changes to the portlet that affect all views of it. When you *personalize* a portlet, you affect just your view of it. If a **Personalize** link is set to display, you can make the same changes discussed in this section to your personal view of the Basic or Advanced Search portlet by clicking the **Personalize** link in the portlet header.

16.3 Working with the Custom Search Portlet

The Custom Search portlet included with Oracle Portal allows page builders to define a variety of searches against information uploaded to your portal. Using this portlet,

you can define unique search forms, search results pages, and predefined search queries that all meet very specific search requirements.

This section provides information on how to work with Custom Search portlets. It includes the following subsections:

- [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#)
- [Section 16.3.2, "Setting Custom Search Options"](#)
- [Section 16.3.3, "The Custom Search Form"](#)
- [Section 16.3.4, "The Custom Search Results Page"](#)
- [Section 16.3.5, "Creating a Portlet that Publishes Search Results Automatically"](#)
- [Section 16.3.6, "Restricting Portal Content from a Custom Search"](#)
- [Section 16.3.7, "Setting Search Criteria for a Custom Search Portlet"](#)
- [Section 16.3.8, "Defining Separate Portlets for Search Forms and Search Results"](#)

16.3.1 Placing a Custom Search Portlet on a Page

To place the Custom Search portlet on a page:

1. Go to the page where you will add the Custom Search portlet.
2. Switch to **Edit** mode.
3. Click the **Add Portlet** icon in the region where you will add the portlet.
If the region already includes items, you cannot add a portlet to the region.
4. In the Portlet Repository, enter `custom search` in the **Search** field, and click **Go**.
5. In the **Portlet Repository Search Results** list, click **Custom Search**.
6. Click **OK**.

The Custom Search portlet is added to the page.

16.3.2 Setting Custom Search Options

With custom search configuration, some options affect all Custom Search portlets, and some affect only a particular instance of the portlet. The options that affect all search portlets are set at the administrator level. The options for a particular instance of the Custom Search portlet are set at the portlet level.



This section discusses the options that are set at the portlet level. You'll find information about setting options at the administrator level in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*, available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

To set custom search options at the portlet level:

1. Go to the page that contains the Custom Search portlet.
2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon associated with the portlet.
4. Edit the custom search options as required.

Five tabs contain the options for the Custom Search portlet:

- **Portlet Type**—Use the Portlet Type tab to generally define the type of Custom Search portlet you will create. See [Section 16.3.2.1, "Custom Search - Portlet Type Tab"](#) for more information.
- **What to Search**—Use the What to Search tab to specify the type of content and range of page groups (or a page) to be searched. See [Section 16.3.2.2, "Custom Search - What to Search Tab"](#) for more information.
- **Search Criteria**—Use the Search Criteria tab to enter specific search terms and define filters to further refine your search. See [Section 16.3.2.3, "Custom Search - Search Criteria Tab"](#) for more information.
- **Search Form**—Use the Search Form tab to design the search form your users will see when you opt to **Display a search form for users to fill in** (on the Portlet Type tab). See [Section 16.3.2.4, "Custom Search - Search Form Tab"](#) for more information.
- **Results Display**—Use the Results Display tab to specify a target page for search results. If the portlet will be used to display search results, you can also select display options, including extra services the page will display and the style and layout of the search results. See [Section 16.3.2.5, "Custom Search - Results Display Tab"](#) for more information.

5. Click OK.

16.3.2.1 Custom Search - Portlet Type Tab

Use the Portlet Type tab to generally define the type of Custom Search portlet you will create. [Table 16–1](#) lists and describes the Custom Search options that are available on the Edit Defaults: Portlet Type tab.

Table 16–1 Custom Search Options on the Edit Defaults: Portlet Type tab

Option	Description
Display a search form for users to fill in	Users see a search form in this Custom Search portlet. Whether users can enter and select their own search criteria is dependent on how you configure options on the Section 16.3.2.4, "Custom Search - Search Form Tab" .
Automatically display search results	Search results from predefined search criteria are displayed in this Custom Search portlet in lieu of a search form. Users cannot change, or customize the search criteria, so use this option for publishing purposes only. The search is defined by options you specify on the Section 16.3.2.2, "Custom Search - What to Search Tab" and Section 16.3.2.3, "Custom Search - Search Criteria Tab" . The search results are displayed with style settings defined on the Section 16.3.2.5, "Custom Search - Results Display Tab" .
Cache the search results for ... minutes	Search results from an automatic query can be cached. If users access the Custom Search portlet within the specified number of minutes after the search was executed, they see a cached version of the original search results.
Do not cache the search results	Every time users return to the page where this Custom Search portlet is displayed, the search is re-executed and the results are refreshed.
Display name	A display title for the Custom Search portlet. The default is <i>Custom Search</i> .

16.3.2.2 Custom Search - What to Search Tab

Use the What to Search tab to specify the type of content and range of page groups (or a page) to be searched. [Table 16-2](#) lists and describes the options that are available on the Edit Defaults: What to Search tab.

Users cannot override the page group restrictions you define on this tab. However, if the Custom Search portlet displays a search form, you may choose whether users can override the content type and page settings, or further restrict your page group selections, by displaying/hiding these options on the search form ([Section 16.3.2.4, "Custom Search - Search Form Tab"](#)).

Table 16–2 Custom Search Options on the Edit Defaults: What to Search tab

Option	Description
What type of content should be searched?	<p>Search results will return any portal object that matches the search criteria, whether it be an item, such as a link to a file or image that contains the search term; or a page, category, or perspective that contains the search term.</p> <p>The selection you make here works with your selection for the Choose type of content to search option, which appears on the Search Form tab. Additionally, it is affected by where you choose to display your results.</p> <p>Results displayed in the same portlet:</p> <ul style="list-style-type: none"> ■ When you choose Any and Choose type of content to search, the user can choose whether to search items, pages, categories, or perspectives ■ When you choose Any but do not Choose type of content to search, the user can search only for items. ■ When you select a specific type of content, such as a page, category, perspective, or item, Choose type of content to search has no effect and the <i>Return Only</i> field is not displayed on the search form. <p>Results displayed on a different page:</p> <p>In this scenario, one Custom Search portlet defines the search submission criteria (the <i>search form</i>). A second Custom Search portlet defines how search results are displayed (the <i>search results</i>). The search form portlet and search results portlet are on different pages.</p> <ul style="list-style-type: none"> ■ If Any is selected in the results portlet, the content type is determined by the Choose type of content to search setting on the search form portlet. It defaults to Items if no type is specified on the search form. ■ If a specific content type is selected in the results portlet, the content type selected in the search form portlet is ignored. The user can search for the type selected in the search results portlet only. <p>Results displayed automatically:</p> <ul style="list-style-type: none"> ■ If Any is selected in the results portlet, the content type defaults to <i>Items</i>. ■ If you select a specific content type, results of the content type specified are displayed. <p>Summary of Option Values:</p> <ul style="list-style-type: none"> ■ Any - Search returns links to all items, pages, categories, and perspectives that meet the search criteria. ■ Items - Search returns links to items only. ■ Pages - Search returns links to pages only. ■ Items - Search returns links to items only. ■ Categories - Search returns all categories that meet the specified search criteria. ■ Perspectives- Search returns all perspectives that meet the specified search criteria.
Search in all page groups, including newly created page groups	<p>All page groups are included in the search.</p> <p>Choose this if you do not want to place any restrictions on the search. This allows users to search all page groups, including any new ones that may be added to the portal in the future.</p>

Table 16–2 (Cont.) Custom Search Options on the Edit Defaults: What to Search tab

Option	Description
Search in selected page groups	<p>Only the page groups you select from the Available Page Groups list and add to the Page Groups to Search list may be searched.</p> <p>If you select two or more page groups, only shared attributes may be used for search criteria.</p>
Which pages should be searched?	<p>Only the page you select from the list of available pages is searched.</p> <p>You can restrict searches to one page <i>or</i> one or more page groups. When a page is selected, any page group selections are ignored.</p>
Include sub-pages	All sub-pages of the selected page may also be searched.

16.3.2.3 Custom Search - Search Criteria Tab

Use the Search Criteria tab to pre define specific search terms and define filters to further refine your search. [Table 16–3](#) lists and describes the options that are available on the Edit Defaults: Search Criteria tab.

If the Custom Search portlet displays a search form, you may choose whether users can override the search criteria defined here by displaying/hiding the search attributes on the search form ([Section 16.3.2.4, "Custom Search - Search Form Tab"](#)).

Table 16–3 Custom Search options on the Edit Defaults: Search Criteria tab

Option	Description
Search For	<p>Enter the term(s) to be searched for. Search terms are not required. For example, if you choose to search for a specific attribute, such as a Create Date, and leave this field blank, all objects within the selected page groups/pages that share that Create Date will display in your search results. On the other hand, if you enter a search term, such as <i>policy</i>, and specify the Create Date, search results will include all objects within the selected page groups/pages that include the word <i>policy</i> and were created on the specified date.</p> <p>Note that if Oracle Text is disabled, only object metadata, that is, the content of their attributes, is searched. See also Section A.2.4, "Base Searchable Attributes".</p>

Table 16–3 (Cont.) Custom Search options on the Edit Defaults: Search Criteria tab

Option	Description
By default, find results that	<p>Indicate how rigorously the search terms you entered into the Search For field should be applied to the search. For example, if you enter three terms, <i>policy</i>, <i>benefit</i>, <i>retirement</i>, and you choose:</p> <ul style="list-style-type: none"> ■ Contain all of the terms, search results must contain all three terms in any order, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain any of the terms, search results must contain at least one of the terms and may contain more than one, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain these terms exactly, search results must contain any of the search terms exactly as specified in the Search field (for example, a search for <i>benefit</i> will not return <i>benefits</i>). This option is available only when Oracle Text is disabled. <p>When Oracle Text is enabled, a larger set of operators are available for selection. For more detail, see Table 2–1, "Search Operators". Portal administrators can enable/disable Oracle Text on the Global Settings: Search page. For more information, see the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>, available on the Oracle Portal documentation page of the Oracle Technology Network at http://www.oracle.com/technology/products/ias/portal/documentation.html.</p>
Choose Attributes	<p>Click this link to include additional attributes within the search query. You can hide the selected attributes from search form users, if you wish.</p> <p>When you click this link, an attribute selector is displayed. Move all the attributes you require to the Selected list, then click OK. All the attributes you select are displayed on the:</p> <ul style="list-style-type: none"> ■ Search Criteria tab, allowing you to predefine search criteria for all/any of the selected attributes ■ Search Form tab, allowing you to control whether the selected attributes are displayed on the search form, or hidden from the user <p>Users may filter search results using attributes such as: Author, Base Item Type, Category, Character Set, Create Date, Creator, Date Updated, Description, Display Name, Expire Date, File Name, Item Type, Keywords, Last Updated By, MIME type, Name, Perspectives, Publish Date, URL, Version Number. See also Section A.2.4, "Base Searchable Attributes".</p>
Page Group	<p>Display only. The name of the page group to which the attribute belongs. This column displays only if a single page group was selected on the What to Search tab.</p>
Attribute	<p>Display only. The name of the attribute to be available for use as a search criterion, for example, Create Date, Description, Display Name, and so on.</p>
Data Type	<p>Display only. The data type of the attribute.</p>
Restriction	<p>Restrict the attribute's relationship to its default value, such as attribute <i>equals</i> default value, attribute <i>contains all</i> default value, and so on.</p> <p>The datatype of the attribute determines the restriction options available. Only values applicable to the datatype are displayed.</p>

Table 16–3 (Cont.) Custom Search options on the Edit Defaults: Search Criteria tab

Option	Description
Default Value	<p>The default search value of the attribute. This column is entitled Value, if Automatically display search results is selected on the Portlet Type tab because the user cannot override the value specified here.</p> <p>There are two special default values: #TODAY#, which is today's date, and #USER#, which is the currently logged in user. Additionally, you can specify #TODAY#+<i>n</i> or #TODAY#-<i>n</i>, where <i>n</i> is an integer. These values are case sensitive.</p> <p>For example, if you want to search for all items created in the last seven days, choose the Create Date attribute, set Restriction to Greater Than, and the Default Value to #TODAY#-7.</p> <p>If you are defining search criteria for an automatic search query and no search term or page group is specified, at least one attribute must have a value.</p> <p>If Oracle Text is enabled, you can choose more than one perspective. You can perform a search that Matches All or Matches Any of the perspectives you select. You can also choose Include Sub-perspectives to extend your search to perspectives beneath the perspectives you have chosen.</p>

16.3.2.4 Custom Search - Search Form Tab

Use the Search Form tab to create the search form your users will see when you opt to **Display a search form for users to fill in** (Section 16.3.2.1, "Custom Search - Portlet Type Tab"). Table 16–4 lists and describes the options that are available on the Search Form tab.

Table 16–4 Custom Search options on the Edit Defaults: Search Form tab

Option	Description
Search terms box	Select this to enable users to enter their own search terms.
Search terms restriction selector	<p>Select this, provided Search terms box is selected, to enable users to place additional restrictions on the search terms. For example, if users enter three terms, <i>policy</i>, <i>benefit</i>, <i>retirement</i>, and you have specified:</p> <ul style="list-style-type: none"> ■ Contain all of the terms, search results must contain all three terms in any order, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain any of the terms, search results must contain at least one of the terms and may contain more than one, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain these terms exactly, search results must contain any of the search terms exactly as specified in the Search field (for example, a search for <i>benefit</i> will not return <i>benefits</i>). This option is available only when Oracle Text is disabled. <p>If search terms or search operators are defined on the Search Criteria tab, they appear as defaults on the search form. If you choose not to display the search term box or restriction selector, any predefined values become hidden search criteria.</p>

Table 16–4 (Cont.) Custom Search options on the Edit Defaults: Search Form tab

Option	Description
Choose a page group to search	<p>Select this to enable users to choose one or more page groups to search. The page groups that appear on the list on the search form depend on the options chosen on the What to Search tab. If you chose:</p> <ul style="list-style-type: none"> ■ Search in all page groups, including newly created page groups, the list includes all page groups in your portal ■ Search in selected page groups, the list includes the page groups that were selected on the What to Search tab <p>In both cases, the user can select one or more page groups by moving page groups from the Available list to the Selected list.</p> <p>The heading <i>Search In</i> that displays over this field can be hidden using the Subsection headers option described in the Other Options section of this table.</p> <p>Note that searches can be restricted to one or more page groups <i>or</i> pages. When a page is selected, any page group selections are ignored.</p> <p>If you choose not to display this field and the user does not restrict the search to one or more pages (see next section), the page groups selected on the What to Search tab are searched. If no page groups are selected on the What to Search tab, <i>all</i> page groups are searched.</p>
Choose a page to search	<p>Select this to enable users to identify a single page, and, optionally, its sub-pages, to search.</p> <p>Note that searches can be restricted to one or more page groups <i>or</i> pages. When a page is selected, any page group selections are ignored.</p> <p>The list of available pages depends on which page groups are selected on the What to Search tab:</p> <ul style="list-style-type: none"> ■ If a single page group is selected, the user can select a page from this page group and Personal Pages (located in the Shared Objects page group) only. ■ If multiple page groups or no page groups are selected, the user can select a page from any page group.
Order search results	<p>Select this to enable users to specify how their search results should be organized, for example, by Score, Create Date, Author, and so on. Users may also select whether results are displayed in Ascending or Descending order.</p> <p>Some of the options in the Order By list may not be applicable to certain search results. In such cases, the particular returned result is ordered by <i>Display Name</i>. For example, the results are ordered by Author and a returned result has no author.</p>
Set number of results per page	<p>Select this to enable users to specify how many results should appear on a page. If the number of results exceeds the value specified here, they are placed on additional pages.</p> <p>If the user chooses not to provide a value or this option is not displayed on the search form, the value specified in the search results portlet is used instead.</p>
Set maximum number of results	<p>Select this to enable users to limit the number of results returned from a search.</p>

Table 16–4 (Cont.) Custom Search options on the Edit Defaults: Search Form tab

Option	Description
Choose type of content to search (items, categories, perspectives, or pages)	<p>Select this to enable users to specify the type of results to return, either categories, perspectives, pages, or items.</p> <p>For this option to take effect, the option What type of content should be searched? must be set to Any on the Custom Search portlet that is being used to display the search results. If it is not, only search results of the chosen content type are returned, and users are not given the option to choose a content type.</p> <p>If it is not set to Any:</p> <ul style="list-style-type: none"> ■ Only search results of the chosen content type are returned; user selections are ignored. ■ Users are not given the option to choose a content type if the same portlet displays the search form and the search results.
Search Tips link	Select this to add a link to the Search Form that provides users with help on how to set up search criteria.
Advanced Search link	<p>Select this to display a link on the Search Form that will take users to an advanced search page where they can specify additional search criteria.</p> <p>Advanced Search link details are specified by the portal administrator on the Global Settings: Search page. For more information, see the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>, available on the Oracle Portal documentation page of the Oracle Technology Network at http://www.oracle.com/technology/products/ias/portal/documentation.html.</p>
Image	<p>Select this to display an image with your search form. Choose:</p> <ul style="list-style-type: none"> ■ Default search image, to display the default image, a magnifying glass, on the search form ■ Custom image, to display your own selected image on the search form <p>Click the Browse icon next to this option's related input field to locate the image file you will use. If your image does not appear on the resulting list, upload it into your portal.</p> <p>When you create an image item, you either upload an image from your file system, or enter a URL to an image. Do not choose an image item that points to a URL. If you do, you will see a broken image.</p>
Internet Search Engine link	<p>Select this to display a link to an external search engine, such as Google or Yahoo, on the search form.</p> <p>URL and link text for the external search engine are specified by the administrator on the Global Settings: Search page. For more information, see the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>, available on the Oracle Portal documentation page of the Oracle Technology Network at http://www.oracle.com/technology/products/ias/portal/documentation.html.</p>
Reset button	Select this to display a button that enables users to reset the search criteria.
Subsection headers	Select this to display group headings for items displayed on the search form, such as <i>Search In</i> , <i>Filter By</i> , and <i>Results Options</i> .

Table 16–4 (Cont.) Custom Search options on the Edit Defaults: Search Form tab

Option	Description
Hidden/Displayed Attributes	<p>Select which attributes to show on the search form. The order of attributes appears to users in the order you set for the Displayed Attributes list. Reorder this list using the arrow icons to the right of the list.</p> <p>Note: The list of attributes available here depend on those chosen on the Search Criteria tab. If the attribute you want to display (or hide) is not available, click the Search Criteria tab and then Choose Attributes.</p>
Allow users to add extra attributes to the search	<p>Select this to enable users to specify additional attribute search criteria. Checking this will display the Choose Attributes link on the search form.</p>
Allow users to choose Match Any/Match All for attributes	<p>Select this to allow users to set restrictions on attribute searches. Providing that <i>more than one</i> visible attribute is available, selecting this option places two radio buttons on the form:</p> <ul style="list-style-type: none"> ▪ Match All Of The Following, restricts the search to matching all selected attributes ▪ Match Any Of The Following, opens the search to matching any one or more of the selected attributes <p>If these options are not displayed on the search form, the search will return results that match <i>all</i> the attribute search criteria specified.</p>

16.3.2.5 Custom Search - Results Display Tab

Use the Results Display tab to specify a target page for search results. If the portlet will be used to display search results, you can also select display options, including extra services the page will display and the style and layout of the search results. [Table 16–4](#) lists and describes the options that are available on the Edit Defaults: Results Display tab.

Caution: When you display search results on a different page from the search form, remember that you must edit options on the Results Display tab of the *results* portlet and not the search form portlet. See also [Section 16.3.8, "Defining Separate Portlets for Search Forms and Search Results"](#).

Table 16–5 Custom Search options on the Edit Defaults: Results Display tab

Options	Description
Default Search Results Page (Default when displaying a search form)	<p>Choose this to display the search results on the default Search Results Page. This is the default when the Custom Search portlet displays a search form.</p> <p>The Default Search Results Page is specified by the administrator on the Global Settings: Search page. For more information, see the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> available on the Oracle Portal documentation page of the Oracle Technology Network at http://www.oracle.com/technology/products/ias/portal/documentation.html.</p>

Table 16–5 (Cont.) Custom Search options on the Edit Defaults: Results Display tab

Options	Description
Custom Search Results Page	Choose this to display search results on a page that you specify. To select a page, click the Browse icon next to the input field. To display search results, the target page must contain a Custom Search portlet.
This Portlet (only choice when search results are automatically displayed)	<p>Choose this to display search results in the same portlet from which the search was executed.</p> <p>Notes</p> <ul style="list-style-type: none"> ■ This is the only choice available when you opt to automatically display search results. ■ If you select this option, the portlet will be unable to display search results for any other search portlet. If you want this portlet to display its own results and results from another portlet, do not choose this option. Instead, select the option Custom Search Results Page (described earlier) and then choose the name of the page that is displaying this portlet.
Bulk action link	<p>Displays a Bulk Action link along with search results. This allows users to perform actions on multiple objects returned by the search. This link displays only when a search is performed on a single page group. It is not displayed for the <i>Shared Objects</i> page group.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>
Results pagination	<p>Choose this to display the Previous and Next icons and a results summary so users can view search results on a page-by-page basis. If you choose not to paginate results, the number of results returned is limited to the value you enter in the Show a maximum of results per page field.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>
Show a maximum of results per page	<p>Choose this to specify the maximum number of results returned on a page. This becomes the total allowable number of results returned if Results pagination is not also selected.</p> <p>If you have chosen to allow users to Set maximum number of results (on Search Form tab), the value specified here becomes the default value displayed on the search form.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>
Save search link with link text	<p>Choose this to display a <i>Save Search</i> link with the search results. The text you enter here becomes the link text. The default is <i>Save Search</i>.</p> <p>This enables users to save the defined search criteria and rerun the same search without re specifying.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>

Table 16–5 (Cont.) Custom Search options on the Edit Defaults: Results Display tab

Options	Description
Search form with submission criteria	<p>Choose this to display the search form, along with the last-specified search criteria, on the search results page. This way, users can adjust the criteria and resubmit the search if it didn't yield the desired result.</p> <p>If search results are to be displayed in a portlet other than the one from which the search was submitted, you may want to set the same search form options for both portlets (the search form portlet and the search results portlet). If the portlets are set up differently, some of the original search criteria may not be visible on the results page. For example, if the search form portlet displays a page selector but the results portlet does not, the original page criteria will not be displayed in the results portlet's search form as expected. The one exception here is your search attribute selections. All the search attributes that are displayed on the search form portlet will appear on the results portlet's search form. In this case, the attribute selections on the results portlet are ignored.</p> <p>This option is not available if the Custom Search portlet is set up to display search results automatically.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>
Style	<p>Select a style for <i>item and page</i> details returned in search results. The default is Main Style. This style does not affect the appearance of the portlet itself or the page that displays the portlet. It only affects the item and page results, that is, their font style, size, color, and so on.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>
Available/Displayed Attributes	<p>Select the attributes to display alongside <i>item and page</i> search results. Use the Move icons to move them from Available to Displayed Attributes. The order of Displayed Attributes is the order they appear on the search results page. Use the Move icons to the right of this list to rearrange the order of display.</p> <p>Notes:</p> <p>Objects, such as perspectives, that are hidden (at page group level) are not displayed with search results, even if the associated attribute is selected here.</p> <p>Only attributes that are suitable for display alongside search results are available for selection. For more detail, see Section A.2.3, "Base Search Result Display Attributes".</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>

Table 16–5 (Cont.) Custom Search options on the Edit Defaults: Results Display tab

Options	Description
Order search results by	<p>Choose how search results are sorted, that is, by Score, Author, Create Date, Display Name, and so on. Then select whether the display order is Ascending or Descending.</p> <p>Some of the options in the Order By list may not be applicable to certain search results. When this occurs, Order search results by defaults to <i>Title</i>. For example, if a page returned by the search does not have an Author value, and the user chose to order by Author, the Title is used for the search results order.</p> <p>Note: This setting applies only to the portlet that is being edited. If your search results are to be displayed by a different Custom Search portlet, then be sure to set a value for this option in the search results portlet.</p>

16.3.3 The Custom Search Form

This section discusses the options available on the default Custom Search Form and how you can build your own customized versions. It includes the following subsections:

- [Section 16.3.3.1, "Understanding the Default Custom Search Form"](#)
- [Section 16.3.3.2, "Editing the Default Custom Search Form"](#)

16.3.3.1 Understanding the Default Custom Search Form

When you place the Custom Search portlet on a page, you get the default version of the Custom Search Form. You can edit the portlet defaults to display other content in lieu of the form, such as the search results. But the first thing you see, before you edit defaults, is the default version of the Custom Search Form. [Table 16–6](#) lists and describes the elements that make up the default Custom Search Form.

Figure 16–1 The Default Version of the Custom Search Form (Oracle Text Enabled)
Table 16–6 Options Available on the Default Version of the Custom Search Form

Option	Description
Search field and button	<p>Enter the term(s) you want to search for. Separate terms with spaces. Enclose phrases in quotation marks.</p> <p>Click the Search button to execute the search.</p>

Table 16–6 (Cont.) Options Available on the Default Version of the Custom Search Form

Option	Description
Find results that	<p>Use this list to specify how rigorously the search results should match the terms entered in the Search field. For example, if you enter three terms, <i>policy, benefit, retirement</i>, and you choose:</p> <ul style="list-style-type: none"> ■ Contain all of the terms, search results must contain all three terms in any order, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain any of the terms, search results must contain at least one of the terms and may contain more than one, as entered or as part of a larger word (for example, <i>benefit</i> or <i>benefits</i>) ■ Contain these terms exactly, search results must contain any of the search terms exactly as specified in the Search field (for example, a search for <i>benefit</i> will not return <i>benefits</i>). This option is not available if Oracle Text is enabled. <p>When Oracle Text is enabled, a larger set of operators are available for selection. For more detail, see Table 2–1, "Search Operators". Oracle Text is enabled by default, but portal administrators can enable/disable Oracle Text on the Global Settings: Search page. For more information, see the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>, available on the Oracle Portal documentation page of the Oracle Technology Network at http://www.oracle.com/technology/products/ias/portal/documentation.html.</p>
Page Groups	<p>Use this to limit the range of the search to one or more selected page groups. Click the Browse icon to select from a list of page groups to search. This opens a secondary window where users can move one or more page groups from an Available to a Selected list.</p> <p>By default, all page groups are available.</p> <p>Note that searches can be restricted to one or more page groups <i>or</i> pages. When a page is selected, this Page Groups option is ignored.</p>
Page	<p>Use this to select a specific page to search. Clicking the Browse icon opens a secondary window where users may select a page. By default, any page from any page group may be selected.</p> <p>When a page is selected, this Page Groups option is ignored.</p>
Include sub-pages	<p>Select this option to include all sub-pages of the selected page in your search.</p>
Choose Attributes	<p>Click this link to choose which search attributes are displayed on the search form. Then define attribute values to filter search results.</p> <p>By default, you may filter search results by attributes such as Author, Base Item Type, Category, Character Set, Create Date, Creator, Date Updated, Description, Display Name, Expire Date, File Name, Item Type, Keywords, Last Updated By, MIME type, Name, Perspectives, Publish Date, URL, Version Number. See also Section A.2.4, "Base Searchable Attributes".</p>

Table 16–6 (Cont.) Options Available on the Default Version of the Custom Search Form

Option	Description
Match All/Any Of The Following	Use these options to further restrict your search: <ul style="list-style-type: none"> ■ Select Match All Of The Following to limit search results to only those objects that include all of the attributes and values listed beneath these options. In the case of the default Custom Search Form, each result must contain all selected Perspectives and Categories. ■ Select Match Any Of The Following to get search results that contain at least one of the attributes and values listed beneath these options.
Perspective Match All / Match Any	(Oracle Text enabled) Specify which perspective(s) should apply to search results. Choose Match All or Match Any to perform a search that matches all/any of the perspectives you select.
Include Sub-perspectives	(Oracle Text enabled) Select this option to include all sub-perspectives of the perspectives you select.
Perspective Equals	(Oracle Text disabled) Specify which perspective should apply to the search results.
Category Equals	Specify which category should apply to the search results.
For advice on how to search, read the Search Tips	Click this link to open a list of tips for refining a search.

16.3.3.2 Editing the Default Custom Search Form

You can create unique search forms that meet very specific search requirements by editing the defaults of a Custom Search portlet. For example, you can determine which actions can be performed by users of the search form and which links, buttons, and headings are displayed on the search form.

To edit the defaults of a Custom Search Form:

1. Go to the page that contains the Custom Search portlet.
For more information, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).
2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon associated with the portlet.

The Edit Defaults: Custom Search page opens. This page includes these five tabs (described fully in the tables earlier):

- [Section 16.3.2.1, "Custom Search - Portlet Type Tab"](#)
- [Section 16.3.2.2, "Custom Search - What to Search Tab"](#)
- [Section 16.3.2.3, "Custom Search - Search Criteria Tab"](#)
- [Section 16.3.2.4, "Custom Search - Search Form Tab"](#)
- [Section 16.3.2.5, "Custom Search - Results Display Tab"](#)

The following steps highlight those options which affect the search form.

4. On the **Portlet Type** tab:
 - a. To specify that this portlet must display a search form, select **Display a search form for users to fill in**.

- b.** Change the **Display name** (portlet title) if you wish.
- 5.** Click the **What to Search** tab to pre-select the page groups, pages and content type that may be searched by users of this search form:

For more information see [Section 16.3.6, "Restricting Portal Content from a Custom Search"](#).

- 6.** Click the **Search Criteria** tab to pre-define a set of conditions for this search form.

If you do not want users to be able to override any, or some of the search criteria chosen here, make sure you hide the associated fields on the search form. You do this by setting display options on the **Search Form** tab.

For more information see [Section 16.3.7, "Setting Search Criteria for a Custom Search Portlet"](#).

- 7.** Click the **Search Form** tab to create the search form your users will see:

- a.** Select **Search term box** to enable users to enter their own search terms.

If you want the user to be able to place additional restrictions on the search terms, like *Contains all of the terms*, select **Search terms restriction selector**.

- b.** In the section **Allow users to**, select all the actions that want your search form users to be able to perform.

For example, do you want your users to be able to choose which page groups, page or content type is searched? Do they need to control the order in which search results are returned or limit the number of results displayed?

- c.** In the section **Other Options** choose which links, buttons, headings and images are displayed on the search form.

- d.** Choose which search attributes appear on the search form and the order in which they are displayed.

Alternatively, hide attributes from your users by moving them to the **Hidden Attributes** list. If the attribute you want is not listed, first click the **Search Criteria** tab, the **Choose Attributes** link and select the missing attribute.

Note: On the search form, a combo box is used to display search attribute values associated with *most* LOV formats (check box, combo box, radio group, and so on). However a pop up control is used to display LOVs that are defined with the pop up format selected.

If you choose to display a custom attribute that is associated with an LOV, make sure that all the value fields (as well as the display name fields) of the LOV are populated. If a value field is empty, there will be no criteria on which to search.

- e.** Select **Allow users to add extra attributes to the search** to enable users to specify additional attribute search criteria.

Checking this will display the *Choose Attributes* link on the search form.

- f.** Select **Allow users to choose Match Any/Match All for attributes** to let users set restrictions on search attributes.

Checking this will display two radio buttons on the search form (Match All/ Any Of The Following). If these options are not displayed, the search will return results that match *all* the attribute search criteria specified.

8. Click the **Results Display** tab to choose where results from this search form are displayed:
 - **This Portlet**, if you choose this option, you can customize how the results are displayed by editing the other display options on this tab.
 - **Default Search Results Page** or **Custom Search Results Page**, when you choose to display results from this search form on a different page, the rest of the display options on this tab do not apply. If you want to customize how search results are displayed on these pages, go to the page, click the Edit Defaults icon associated with its Custom Search portlet and edit the options on the Results Display tab.

Caution: If you do change any of the results display options when **Default Search Results Page** or **Custom Search Results Page** is selected, the target search results page automatically defaults to *This Portlet* and the original result page selection is removed.

For more information see [Section 16.3.4.3, "Customizing Search Results"](#).

9. Click **OK** to save your changes and return to the page.

16.3.4 The Custom Search Results Page

This section discusses the default search results page (for the Custom Search portlet) and describes how you can create new search results pages of your own. This section also explains how you can customize the way results from any Custom Search portlet are displayed on the page:

- [Section 16.3.4.1, "Understanding the Default Search Results Page"](#)
- [Section 16.3.4.2, "Using Your Own Search Results Page"](#)
- [Section 16.3.4.3, "Customizing Search Results"](#)
- [Section 16.3.4.4, "Using Custom Item Types to Customize Search Results"](#)

16.3.4.1 Understanding the Default Search Results Page

The Search Results Page is the default results page for Custom Search portlets and it is located in the *Portal Design-Time Pages* page group. This page displays the results of a search as well as any number of other services you may care to include. The objects displayed in the default Search Results Page ([Figure 16–2](#)) are listed and described in [Table 16–7](#).

Figure 16–2 The Default Search Results Page

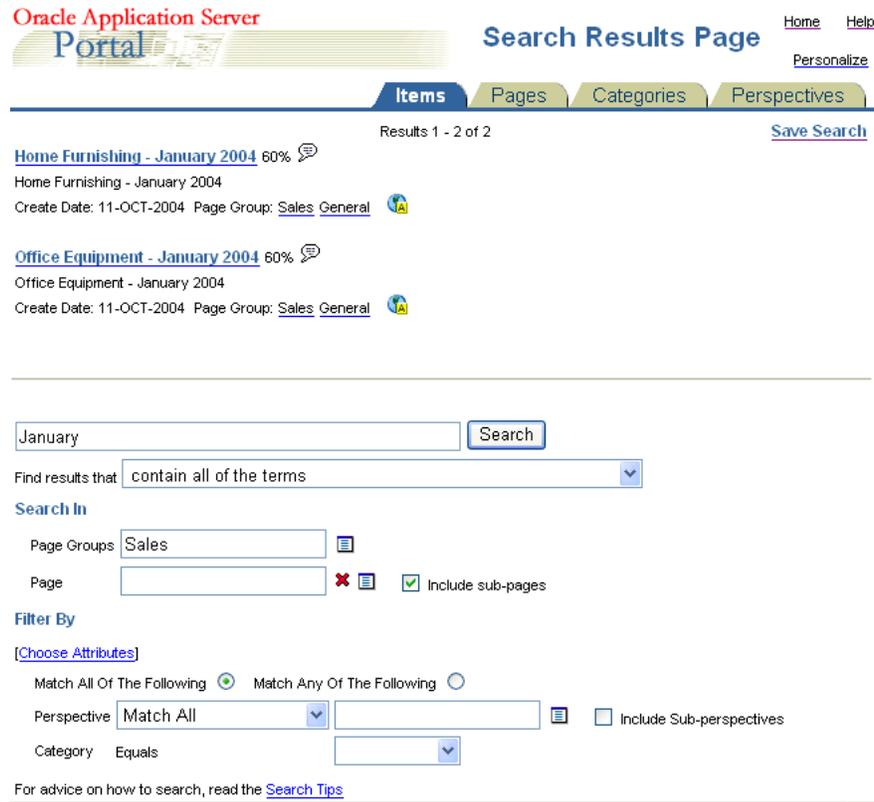


Table 16–7 Elements of the default Search Results Page

Element	Description
Tabs (Items, Pages, Categories, Perspectives)	Each tab contains a Custom Search portlet that is set up to display search results for a different type of portal content. When you view results from an automatic search the tabs are not displayed as these searches can only return results of the same content type.
Items tab	This tab displays all returned results that are items. Items include files, images, page links, and the like. Users click a result, and the file is opened, the image is displayed, the link is executed, and so on.
Pages tab	This tab displays all returned results that are pages. Users click a result, and the page is opened.
Categories tab	This tab displays all returned results that are categories. Users click a result, and a page is opened with a list of portal content that is classified under that category.
Perspectives tab	This tab displays all returned results that are perspectives. Users click a result, and a page is opened with a list of portal content that is classified under that perspective.
Results	This informational field displays the range of results on the current page and the total number of results.

Table 16–7 (Cont.) Elements of the default Search Results Page

Element	Description
Save Search	Users click this button to save the search criteria specified for the current search. Users have the option of adding a Saved Searches portlet to any page. When they click Save Search , the current search criteria is added as a new link in the Saved Searches portlet. In the portlet, they click the link to a particular saved search to rerun the search.
Result	<p>The result link jumps to the item, page, category or perspective that matches the search criteria.</p> <p>The user will not see content they are unauthorized to view, content that has expired, items that are not yet published, content that is derived from a template, portlet instances, Portal Smart Links, or multiple item versions (only the current version of an item is returned when versioning is enabled). Such content is not returned in search results.</p> <p>Note that new or recently modified portal content is not returned in search results until such changes are reflected in the Oracle Text search indexes. If your portal is installed in Oracle Database 10g, Oracle Text indexes can be set up to synchronize immediately after portal content is added, updated, or deleted. Contact your portal administrator to learn more about the current synchronization schedule for Oracle Text indexes in your portal. See also <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>
Score	The Oracle Text relevancy score, rating how well each result matches the search criteria. The score is high when terms are found in the title. If there are multiple terms in the title, the result ranks even higher. Weighting is also given when multiple terms are found close together, or when search results contain the most matches.
Property sheet icon	Click this icon to view the properties (attribute values) of a particular result, such as its description, its publish date, or its expiration period.
Result Attributes	The attributes displayed with each search result are configurable, see Section 16.3.4.3, "Customizing Search Results" . The default attributes include the object's Create Date, its page group, and its classification category and perspective(s).
Search Form	By default, the Search Results Page displays a search form beneath the search results so that users may alter the search criteria and rerun the search without having to navigate back to the original search form.

16.3.4.2 Using Your Own Search Results Page

If the default Search Results Page for the Custom Search portlet does not suit your needs, you can create your own page for search results. If you decide to do this, the new page **must** contain at least one Custom Search portlet. If you want your page to display different types of search results (items, pages, categories, perspectives) you must place additional Custom Search portlets onto tabs like the default Search Results Page. Add one Custom Search portlet on a separate tab for each of the content types your result page must display.

Next you can edit default display options for the portlet(s) to determine how the results appear on your page.

To create and use your own search results page:

1. Go to the page you have created for your search results and add the Custom Search portlet.
For more information, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).
2. Customize how search results are displayed on your page:
 - a. Click the **Edit Defaults** icon beside the portlet.
 - b. Click the **Results Display** tab and customize the appearance of search results as desired.
For details, see [Section 16.3.4.3, "Customizing Search Results"](#).
 - c. Click **OK** to save your changes and return to the page.
3. Configure a search form to use your new results page:
 - a. Go to the page where the search form is displayed.
 - b. Switch to **Edit** mode, then click the **Edit Defaults** icon beside the Custom Search portlet.
 - c. Click the **Results Display** tab to choose where results from this search form are displayed.
 - d. Select **Custom Search Results Page**, and pick the search results page you wish to use.
As you have chosen to display your search results on a different page, the rest of the display options on this tab do not apply. The appearance of your search results are determined by settings on your search results page.
 - e. Click **OK** to save your changes and return to the page.

Now, when you submit a search from this search form, the results are displayed on the new page you have specified.

16.3.4.3 Customizing Search Results

You can use a Custom Search portlet to display results from any Custom Search Form. If the default display options do not suit your requirements you can customize how the results are displayed. For example, you can choose how many results are displayed on each page, as well as the style, layout, and order of the results.

If you choose to display your search form and search results on different pages, note that the style and layout of the search results are controlled by settings within the *results* portlet and not by settings in the *search form* portlet. So, if you want to customize the way the results are displayed, you need to edit options for the results portlet and not the search form portlet.

To customize search results:

1. Go to the page where the search results will be displayed.
This page **must** contain a Custom Search portlet. It is the results page you chose whilst creating your search form, see [Section 16.3.3.2, "Editing the Default Custom Search Form"](#).
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon beside the portlet.

4. Click the **Results Display** tab.

For more information about the options on this tab, see [Table 16-5](#).

5. Choose **Which options should appear with the search results?**

Consider whether your users need to be able to save their searches, or perform actions on objects returned by a search. You can also control how many search results are displayed on a page, and limit the number of results that are returned.

6. Customize the **Style** used to display *item* and *page* search results.

The default is *Main Style*. This style does not affect the appearance of the portlet itself or the page that displays the portlet. It only affects the item and page results, that is, their font style, size, color, and so on.

7. Move all the attributes you want to display with *item* and *page* search results to the **Displayed Attributes** list.

Use the **Move Up** and **Move Down** icons to change the display order for this additional information and introduce <Blank Line> and <Space> attributes to organize the layout. [Section A.2.3, "Base Search Result Display Attributes"](#) describes the attributes that can be displayed alongside search results.

You can display links to associated objects with each search result. For example, users may see links to the page group, page, category and perspective associated with an item. However, note that users clicking on such links will be denied access to the object, if they do not have the required access privileges.

8. Choose how the search results are sorted, that is, **Order Search Results by** Score, Author, Create Date, Display Name, and so on. Then select whether the display order is **Ascending** or **Descending**.
9. Click **OK** to save your changes and return to the page.

The Custom Search portlet is displayed. When you next perform a search, the results are displayed in format you have specified.

16.3.4.4 Using Custom Item Types to Customize Search Results

Out-of-the-box you can choose to display attributes like Display Name, Author, or Create Date with search results, see [Section 16.3.4.3, "Customizing Search Results"](#). You can also use the display attribute *Associated Function*. This special attribute enables you to further customize the appearance and behavior of search results.

Before using the Associated Function attribute, you must create a custom item type and attach a PL/SQL procedure that will implement the special functionality you require. Next, using settings in the Custom Search portlet, you choose the Associated Function display attribute to implement the procedure in your search results.

To customize search results using custom item types:

1. Create the PL/SQL procedure that will display your search results in the required way.

For example, you might create a procedure called `SHOW_PAGE_FOR_ITEM` that displays a hyperlink (when displayed in item search results) pointing to the page where an item lives, rather than to the item itself.

The Oracle Portal Developer Kit (PDK) provides a range of PL/SQL APIs you may find useful when creating PL/SQL procedures. For more information, refer to the PL/SQL API Reference documentation available from the *Portlet Development* page on the Oracle Technology Network at

http://www.oracle.com/technology/products/ias/portal/portlet_development_10g1014.html.

2. Install the PL/SQL procedure and grant the necessary execute permissions.
3. If the procedure is installed in a schema other than PORTAL (for example SCOTT) follow these additional steps:

- a. In SQL*Plus, log in to the Oracle Portal Repository instance as the PORTAL user.
- b. Create synonyms to access the portal procedures, by executing the following script:

```
$MIDTIER_HOME/portal/admin/plsql/wwc/provsyns.sql
```

- c. When prompted, enter the schema name, for example SCOTT.
- d. Create synonyms for every Oracle Portal view used in your procedure.

For example, if your procedure references the view WWSBR_ALL_ITEMS, execute the command:

```
create synonym SCOTT.WWSBR_ALL_ITEMS for WWSBR_ALL_ITEMS;
```

4. Create a custom item type to implement your PL/SQL procedure:
 - a. Click **Navigator**, the name of your **Page Group** and then click **Item Types**.
 - b. Click Create New... **Item Type**.
 - c. Enter an appropriate **Name** and **Display Name**, for example *Show Item On Page*.
 - d. Choose **Base Text** as the **Base Item Type** and then click **Create**.
 - e. Edit the new item type and click the **Procedures** tab.
 - f. Complete the fields for your procedure:
 - Choose PL/SQL as the **Type**.
 - Enter the name of your procedure (pre-fixed with the owning schema) in the **Procedure Call** field. For example, *SCOTT.SHOW_PAGE_FOR_ITEM*.
 - For **Link Text**, enter the hyperlinked text to display with the search result. For example, *Display Item on the Page*.
 - Select **Display Procedure Results With Item**.
 - Choose **Attributes** to pass as parameters to the procedure, if required.
 - g. Choose **OK**.
5. Make the new item type available to the Custom Search portlet on your search results page.

If you have not done so already, place the Custom Search portlet on the page you have created for your search results. For details, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).

- a. Go to page where your customized search results will be displayed.
- b. In Edit mode, click the **Page Group Properties** link and choose the **Configure** tab.
- c. Click the **Edit** link under Types and Classification.
- d. Move the new item type you just created to the list of **Visible Item Types**.

- e. Click **OK** and then **Close**.
6. Specify that the custom item type (implementing your procedure) is displayed with each search result:
 - a. Click the **Edit Defaults** icon for the Custom Search portlet.
 - b. Choose the **Results Display** tab.
 - c. Move **Associated Functions** to the **Displayed Attributes** list and remove any Displayed Attributes that are not required.
 - d. Set other display options, as required.
 - e. Click **OK** to save your changes and return to the page.

To test your search result customizations, create one or more text items based on your custom item type.

16.3.5 Creating a Portlet that Publishes Search Results Automatically

You can use a Custom Search portlet to publish results from predefined search criteria. Users will not be able to change, or personalize the search criteria, so use this type of portlet for publishing purposes only.

For example, you can create a search portlet that lists items created by a particular user, or one that searches for a list of items that belong to a selected category and that have been modified in the last seven days.

To create a portlet that publishes search results automatically:

1. Go to the page that contains the Custom Search portlet.

For more information, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).
2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon beside the portlet.
4. On the **Portlet Type** tab:
 - a. Select **Automatically display search results**.

With this option, users are not able to enter their own search criteria. Instead, the search results appear automatically when the portlet is displayed.
 - b. To cache the results from the automatic query, enter the length of time in minutes that the portlet content is cached.

The default is 10 minutes.

Select **Do not cache the search results** to disable caching. This means that a new search will be executed every time the page containing the portlet is displayed and the results are refreshed.
 - c. Change the **Display name** if you wish.
5. Click the **What to Search** tab to choose the page groups, pages, and content type to be searched:
 - a. For **What type of content should be searched?**, choose whether to search for items, pages, categories, or perspectives.

The **Any** option does not apply when you publish search results automatically; only one content type can be returned.

- b. For **Which page groups should be searched?**, choose all, or select a subset of page groups.

Alternatively, choose **Which pages should be searched?** Click the Browse icon to view the list of available pages and choose a page for this search. To exclude sub-pages from the search, do not select the **Include sub-pages** option.

You can restrict searches to one or more page groups, *or* a page. When a page is selected, all page group selections are ignored.

For more information see [Section 16.3.6, "Restricting Portal Content from a Custom Search"](#).

6. Click the **Search Criteria** tab to define a set of conditions for your search:

- a. In **Search For**, enter a search term for your search query if required.

Optionally, select a default operator for the query, such as **contain all of the terms**, **contain any of the terms**, **contain these terms exactly**. If Oracle Text is enabled in your portal, a larger set of operators will be available. For more detail, see [Table 2-1, "Search Operators"](#).

- b. Click **Choose Attributes** to specify which (if any) of the search attributes are needed to define your search query.

- c. Enter a **Restriction** and **Value** for each selected attribute as required.

If neither a search term or page group is specified, at least one attribute must have a value.

Note that none of the options on the **Search Form** tab apply when the Custom Search portlet is being used to publish search results.

7. Click the **Results Display** tab to define how the results are displayed:

- a. For **Order search results by**, choose the order in which the results are displayed.

- b. Customize how your search results are displayed, as required.

For more information, see [Section 16.3.4.3, "Customizing Search Results"](#).

8. Click **OK** to save your changes and return to the page.

When the Custom Search portlet is displayed, it executes the search query you have specified and automatically displays the results in the same portlet.

16.3.6 Restricting Portal Content from a Custom Search

The Custom Search portlet enables you to restrict the portal content that is included during a search. For example, you can create a portlet that allows users to search for items only, in one specific page group.

Users may not override any page group restrictions that you may impose. However, if the Custom Search portlet displays a search form, you can choose whether users can override your content type and page restrictions, or further restrict your page group selections, by displaying/hiding these options on the search form (see [Section 16.3.3.2, "Editing the Default Custom Search Form"](#)).

To restrict portal content from a Custom Search:

1. Go to the page that contains the Custom Search portlet.

For more information, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).

2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon beside the portlet.
4. Click the **What to Search** tab to choose which page groups, pages, and content type can be searched:

- a. For **What type of content should be searched?**, restrict the search to items, pages, categories, or perspectives.

Alternatively, allow any of these.

If the results are to be displayed in a different portlet, and the Search Results Page is set up to display a particular type of content, the setting for the Search Results Page overrides the content type selected in the Search Form. The user can search only for the type of content that is selected in the Search Results Page.

- b. For **Which page groups should be searched?**, move all the page group(s) allowed to be searched to the **Page Groups to Search** list.

If you do not want to restrict the search and want users to be able to search in any new page groups that may be added to the portal, select **Search in all page groups, including newly created page groups**.

Alternatively, choose **Which pages should be searched?** Click the Browse icon to view the list of available pages and choose a page for this search. To exclude sub-pages from the search, do not select the **Include sub-pages** option.

You can restrict searches to one or more page groups, *or* a page. When a page is selected, all page group selections are ignored.

5. Click the **Search Form** tab:
 - a. Select **Choose a page group to search** to allow the user to further restrict which page groups are searched.

The list of available page groups displayed when the user clicks the **Browse** icon are those selected on the **What to Search** tab. If you want the user to always search in all the page groups you have selected, do not select this option.

Alternatively, select **Choose a page to search** to allow the user to select which page is searched.

- b. Select **Choose type of content to search** to allow the user to restrict the search to items, categories, perspectives, or pages.

For this option to take effect, the Custom Search portlet setting **What type of content should be searched?** must be set to **Any**, on the **What to Search** tab. If it is not, only search results of the chosen content type are returned. The user is not given the option to choose a content type.

6. Click **OK** to save your changes and return to the page.

The Custom Search portlet will only return search results from the portal content you have defined.

16.3.7 Setting Search Criteria for a Custom Search Portlet

The Custom Search portlet enables you to define searches that return results that match a set of predefined conditions. You can predefine a set of conditions, so that they appear on the search form when it is displayed in the portlet. If your Custom Search portlet displays a search form, users can override the search criteria that you define.

Alternatively, you may want to hide search conditions from portlet users so they cannot be changed.

For example, you can create a portlet that searches for a list of items in a selected category that have been modified in the last 7 days. If you do not display the category details, the user can only search in the category you specify. If you choose to display the Date Updated attribute, the default is provided, but the user can modify the date as required.

Note: If an object specified within your search criteria is promoted, moved, or deleted, the search criteria is not updated automatically. For example, if your search criteria includes a category that has been deleted, the category continues to be included in the search until someone explicitly removes it from the search criteria. No error message is displayed; the invalid object is simply ignored.

To set search criteria for a Custom Search portlet:

1. Go to the page that contains the Custom Search portlet.
For more information, see [Section 16.3.1, "Placing a Custom Search Portlet on a Page"](#).
2. Switch to **Edit** mode.
3. Click the **Edit Defaults** icon beside the portlet.
4. On the **Portlet Type** tab:
 - a. To allow users of this portlet to enter search criteria, select **Display a search form for users to fill in**.
 - b. Change the **Display name** if you wish.
5. Click the **What to Search** tab to choose which page groups, pages, and content type to search:
 - a. For **What type of content should be searched?**, choose whether to search for items, pages, categories, perspectives, or any of these.
 - b. For **Which page groups should be searched?**, choose **Search in All Page Groups**, or select a subset of page groups.

Alternatively, choose **Which pages should be searched?** Click the Browse icon to view the list of available pages and choose a page for this search. To exclude sub-pages from the search, do not select the **Include sub-pages** option.

You can restrict searches to one or more page groups, *or* a page. When a page is selected, all page group selections are ignored.

For more information see [Section 16.3.6, "Restricting Portal Content from a Custom Search"](#).

6. Click the **Search Criteria** tab to predefine a set of conditions for your search:
 - a. In **Search For**, enter a default search term for the query if required.
 Optionally, select a default operator for the query, such as **contain all of the terms**, **contain any of the terms**, **contain these terms exactly**. If Oracle Text is enabled in your portal, a larger set of operators will be available. For more detail, see [Table 2–1, "Search Operators"](#).
 - b. Click **Choose Attributes** to specify which (if any) of the search attributes are needed to define your search query.
 All the attributes you select are displayed on the Search Form tab. From there you can control whether the selected attributes are displayed on the search form, or hidden from the user.
 - c. Enter a **Restriction** and **Default Value** for each selected attribute as required.
 With automatic search queries, at least one attribute must have a default value if no search term or page group is specified.
 - d. If Oracle Text is enabled you can choose more than one perspective. You can perform a search that **Matches All** or **Matches Any** of the perspectives you select and if you choose **Include Sub-perspectives** you can extend your search to perspectives beneath the perspectives you have chosen.
7. Click the **Search Form** tab to specify whether users can override the search criteria you have defined:
 - a. Select **Search terms box**, to allow users to enter their own search terms.
 - b. Select **Search terms restriction selector**, to allow users to choose their own operator for the search.
 - c. Hide any search attributes that you do not want users to change, by moving them to the **Hidden Attributes** list.
8. Click **OK** to save your search criteria and return to the page.

The Custom Search portlet is displayed with your search criteria defined.

16.3.8 Defining Separate Portlets for Search Forms and Search Results

You can configure a Custom Search portlet to submit search criteria to another, separate Custom Search portlet that displays the search results. If you do this, you must configure both portlets. Some configuration values are passed from the search submission portlet to the search results portlet, while others are not. [Table 16–8](#) lists and explains the configuration settings that are passed over and those that are not.

To understand [Table 16–8](#), imagine the following scenario:

- Page A hosts Custom Search portlet A, which is set up to submit search criteria.
- Page B hosts Custom Search portlet B, which is used to display results from search criteria defined in portlet A.

Table 16–8 *Sharing of options between Custom Search form and results portlets*

Option	Carried Over?	Explanation
Personalizations	No	Personalizations of a portlet are never carried over to another portlet. Personalizations on Portlet A never show up on Portlet B. For personalizations to apply to both portlets, they must also be made to Portlet B.

Table 16–8 (Cont.) Sharing of options between Custom Search form and results portlets

Option	Carried Over?	Explanation
Results Settings	No	<p>Results settings that are specified on the Results Display tab (Edit Defaults) apply only to the portlet on which they are set. For example, say you choose to display a Saved Search link on Portlet A, but do not on Portlet B. When you submit a search using Portlet A, the Saved Search link is not displayed with search results (on Portlet B).</p> <p>For the Saved Search link to display, it must be specified on the Edit Defaults: Results Display tab in Portlet B.</p>
Search Form Appearance	No	<p>Search form settings and attributes specified on the Search Form tab (Edit Defaults) apply only to the search form on which they are set and not to any search form you might elect to display on your results page.</p> <p>For example, if you select Set maximum number of results on the Edit Defaults: Search Form tab in Portlet A; and you select to display Search form with submission criteria on the Edit Defaults: Search Results tab in Portlet B; when a search is performed from Portlet A, the search form that displays on Portlet B will not automatically include the option to set a maximum number of results (as set on Portlet A).</p> <p>If you want the search form on Portlet B to include exactly the same options and attributes selected in Portlet A, set the same options and attributes on the Search Form tab associated with Portlet B.</p>
Search Criteria	Yes	<p>The specified search criteria, including the search keyword, search attribute values, selected page groups/pages, selected perspectives, hits for each page, and the like are submitted through Portlet A, and returned through Portlet B.</p> <p>Note, however, that these criteria appear as part of the results and are not automatically included on any search form you elect to include on the results page. If you want the search form on Portlet B to include the search criteria selected in Portlet A, set the same options on the Search Form tab associated with Portlet B.</p> <p>Search attribute selections are the exception here. All the search attributes that are displayed on the search form in Portlet A will appear on the search form in Portlet B. In this case, the attribute selections in Portlet B are ignored.</p>
Search Criteria: Hits per page	Yes	<p>This option is considered search criteria; so if it is used on the search form in Portlet A, the value is used in the search.</p> <p>When no value for this option is passed as search criteria, the value specified in the results portlet (Portlet B) is used.</p>
Search Criteria: Max Return	Yes	<p>Max Return is considered search criteria; so if it is on the search form of Portlet A, the value is used in the search. This value is not set in the portlet's Edit Defaults settings (instead, you can allow users to specify a Max Return value); therefore, if none is specified, the number of results returned is not restricted.</p>

Table 16–8 (Cont.) Sharing of options between Custom Search form and results portlets

Option	Carried Over?	Explanation
Search Criteria: Results/Return type	Yes	<p>Results/Return type is considered search criteria. Conditions affect whether this option is shared:</p> <ul style="list-style-type: none"> ▪ The results portlet (Portlet B) only uses values submitted through Portlet A if the option What type of content should be searched?, which appears on the Edit Defaults: What to Search tab, is set to <i>Any</i> on the results portlet (Portlet B). ▪ If the results portlet (Portlet B) has its own return type set to, for example, <i>Items</i>, and the search form (Portlet A) has the return type set to <i>Pages</i>, the <i>Pages</i> setting is ignored and the <i>Items</i> setting is used. ▪ If the results portlet (Portlet B) has its return type set to <i>Any</i>, and no results type is specified on the search form (Portlet A), then <i>Items</i> are always searched.

It is also important to understand how page group/page selection is resolved when a separate Custom Search portlet is used to display search results and the page groups/page selected on the two portlets do not match. Remember that you can select page groups/pages in two different places, on the **Edit Defaults: What to Search** tab and on the search form itself.

For example, if page groups PG1 and PG2 are selected in Portlet A, but the results Portlet B is configured to search:

- a subset of these (PG2), then the common page groups are searched, that is, PG2.
- different page groups (PG3 and PG4), then result Portlet B settings are used, that is, PG3 and PG4.
- any page groups (nothing selected), then Portlet A settings are used, that is, PG1 and PG2.

Similarly, if Portlet A has no page groups selected, then results Portlet B settings are used. If a page group mismatch does occur, a message is displayed to warn the user that the page group selections on both portlets do not match.

Page selections are resolved slightly differently. If a page is selected in Portlet A, the page must reside within the set of searchable page groups (resolved using the rules described previously). Otherwise, no results are returned.

If you want the results on Portlet B to match the page group/page selection in Portlet A, ensure that the options set on Portlet A are a subset or the same as those on Portlet B. Alternatively, do not place any page group restrictions on the results portlet (choose **Search in all page groups, including newly created page groups** in the results portlet). See [Table 16–2, "Custom Search Options on the Edit Defaults: What to Search tab"](#).

16.4 Troubleshooting Search Functionality

My Search portlet displays an advanced search link. Can I change the destination of this link?

Your portal administrator determines the destination of the advanced search link. The advanced search link can be to an external site, another portal page, or a package call within Oracle Portal. As this is a global setting, any changes to the link will be applied

to both new and existing search portlets that display an advanced search link. For more information, refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at

<http://www.oracle.com/technology/products/ias/portal/documentation.html>.

My Search portlet displays an Internet search link. Can I change the destination of this link?

Your portal administrator determines the destination of the Internet search link and the link text that users click to access the specified Internet search engine. As this is a global setting, any changes to the link will be applied to both new and existing search portlets that display an Internet search link. For more information, refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at

<http://www.oracle.com/technology/products/ias/portal/documentation.html>.

Is it possible to add or remove options on Basic and Advanced Search portlets? Neither portlet seems to offer the search features that I need.

The Basic Search and Advanced Search portlets offer few editable options or personalizations; you may change only the portlet title and show/hide the page group selector. If you want a search form that offers a combination of basic/advanced search features, use a Custom Search portlet. The Custom Search portlet is fully customizable, so you can choose what is displayed on the search form.

I changed some search result display settings and now my search portlet does not work properly.

If you change search results settings for a Custom Search portlet (Edit Defaults: Results Display tab) and then it does not display results from another search portlet, it is probably because the search results page setting of the Custom Search portlet was reset to **This Portlet**. Whenever you change display options on the Results Display tab the target search results page automatically defaults to **This Portlet**, overriding the original result page selection (**Default Search Results Page** or **Custom Search Results Page**).

Check the Results Display tab settings to see if this is the problem and then restore your results page selection (**Default Search Results Page** or **Custom Search Results Page**).

I don't see my newly created category listed in the Filter By criteria.

Newly created categories are not always immediately visible in the Filter By section of the Advanced or Custom search forms, usually as a result of caching issues. To invalidate the cache for the portlet in View mode, click the **Personalize** link, then click **OK**. In Edit mode, click the **Edit Defaults** icon and then **OK**.

The Search page group selection box does not seem to be working properly. Some page groups are not displayed and some display incorrectly.

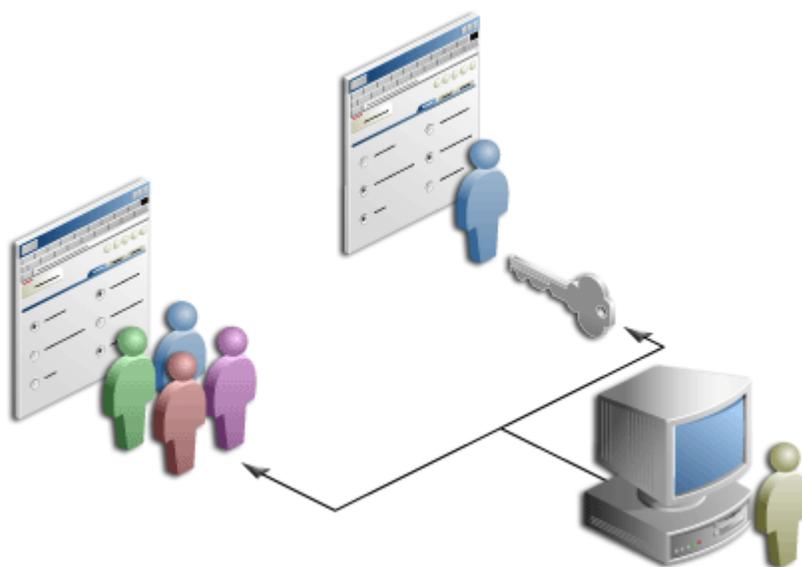
If the name of a page group contains one or more commas it does not display properly in search-related page group selection boxes. This is because the comma character is used as the delimiter between page group names. For example, a page group named *Sales, London, UK*, might appear as three, separate, selectable page group names instead of just a single page group. The extra, invalid page group entries get displayed instead of valid page groups and therefore you might also find that some page groups

appear unavailable. Report your problem to the page group administrator. Page group administrators are advised not to use commas within page group names due to this issue.

Protecting Your Content

Oracle Portal uses privileges to control access to portal objects, such as pages, tabs, items, templates, and styles. Administrators can delegate the assignment of privileges to other users and groups. Privilege assignments enable users and groups to access, personalize, or modify the object. Administrators can also grant global privileges on all objects of a given type.

Figure 17-1 Set Access Rules to Protect Content



This chapter contains information on how to use privileges to control who may view and interact with objects in your portal. It includes the following sections:

- [Section 17.1, "Page and Object Security in Oracle Portal"](#)
- [Section 17.2, "Delegating the Task of Assigning Privileges"](#)
- [Section 17.3, "Granting Global Privileges"](#)
- [Section 17.4, "Securing Page Groups"](#)
- [Section 17.5, "Securing Pages"](#)
- [Section 17.6, "Securing Tabs"](#)
- [Section 17.7, "Securing Portlets"](#)
- [Section 17.8, "Locking Regions"](#)

- [Section 17.9, "Securing Items"](#)
- [Section 17.10, "Granting Privileges on Styles"](#)
- [Section 17.11, "Granting Privileges on Portal Templates"](#)
- [Section 17.12, "Granting Content Attribution Privileges"](#)
- [Section 17.13, "Troubleshooting Page and Object Security Issues"](#)

Intended Audience

This chapter is intended for users who want to understand how security operates within Oracle Portal. The privilege required to perform the actions discussed in this chapter vary according to the type of action. Each section provides information about required privileges. For more information about privileges, see [Appendix B, "Page Group Object Privileges"](#).

17.1 Page and Object Security in Oracle Portal

Oracle Portal provides privilege levels to allow increasing degrees of protection for your data. To determine a user or group's access to an object, Oracle Portal synthesizes the answers to the following questions:

- [Is the object public, or is it restricted to certain users?](#)
- [Has the user or group been granted an explicit privilege on the object?](#)
- [Has the user or group been granted a global privilege on the object type?](#)
- [Does the user or group belong to a special group created by Oracle Portal?](#)

This section explores the underlying meaning of these questions.

Is the object public, or is it restricted to certain users?

All objects in Oracle Portal are either public or restricted. Restrictions are controlled by an access list. Anyone can see a public object—even users who do not log on. When an object is restricted by an access list, only users on the list can see the object. The access list states the extent to which specified users and groups can interact with the object. The list is created through the granting of privileges to users and groups.

You can explicitly make pages and tabs available to public users (on the Access tab of page or tab properties). By extension, a public page or tab's content is also public.

Has the user or group been granted an explicit privilege on the object?

If an object is not public, it is controlled by an access list. The object's creator—or a user with the *Manage* privilege on the object—uses this list to explicitly grant privileges to other users and groups.

Different levels of privilege allow for greater or lesser levels of access. For example, one group might be able to see the object, but not change it. Another group might be able to add, edit, hide, or delete the object.

When an access privilege on an object is granted to a group, all group members have the same level of access to the object. That is, you cannot grant access to most members of a group, excluding one or two members.

You can grant a greater level of privilege to a user who is also a member of a group. For example, the group *Accounting* has the *View* privilege on a page. The user Jane Doe, who is also a member of the *Accounting* group, can be granted additional privileges (as an individual user), such as *Manage Content*.

Has the user or group been granted a global privilege on the object type?

A global privilege applies to all objects of a given type. For example, if you have the global privilege *Manage* on the object type *All Styles*, you can create, edit, or delete any style in Oracle Portal, no matter which page group owns the style. Apply global privileges to both users and groups.

Use global privileges as a means of *implicitly* granting access to an object. Compare this to the object's access list, through which privileges are *explicitly* granted.

Does the user or group belong to a special group created by Oracle Portal?

When your user account is created, the portal administrator decides if you are allowed to log on. If you can log on, you are an *authenticated user*. If you cannot log on, you are a *public user*. Users who can log on belong to the *Authenticated Users* group, one of the default groups provided with Oracle Portal out of the box. The *Authenticated Users* group has the *Create* global privilege on the object types *All Pages* and *All Styles*.

Users with the global privilege *Create* on the object type *All Pages* can create sub-pages in any page group provided they also have the page privilege *Manage* on the parent page under which sub-pages will be created.

Users with the global privilege *Create* on the object type *All Styles* can create styles in any page group on which they also have the page group privilege *Manage Styles*.

Each of the default groups provided by Oracle Portal is granted its own set of global privileges. For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

17.2 Delegating the Task of Assigning Privileges

In a large enterprise, the portal administrator should consider delegating the power to assign privileges. The range of privileges extends from portal-wide to item-specific. A lone portal administrator handling all privilege assignments could easily be overwhelmed by access requests.

Typically, a privilege that provides total control over an object—from a page group to an item—also provides the power to assign equal or subordinate access privileges to other users. For example, a page group administrator—that is, a user with the page group privilege *Manage All* on a page group—can assign the page privilege *Manage* to users and groups. Among other things, this privilege enables users to create sub-pages under the page on which they have the privilege. A user with the page privilege *Manage* can enable item level security and assign item-level access privileges.

Table 17-1 lists the privileges that include the power of privilege assignment and the types of privileges that can be assigned.

Table 17-1 Privileges that Include the Assignment of Privileges

Privilege	Power of Assignment
The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i>	<ul style="list-style-type: none"> ■ Page group privileges on all page groups ■ Page privileges on all pages in all page groups ■ Tab privileges on all tabs in the page group ■ Item privileges on all items in the page group ■ Template privileges on all templates in the page group ■ Style privileges on all styles within the page group
The global privilege <i>Manage Templates</i> on the object type <i>All Page Groups</i>	<ul style="list-style-type: none"> ■ Template privileges on all templates on all page groups
The global privilege <i>Create</i> on the object type <i>All Page Groups</i>	<ul style="list-style-type: none"> ■ Page group privileges on all page groups the user creates ■ Page privileges on all pages the user creates ■ Tab privileges on all tabs the user creates ■ Item privileges on all items the user creates
The global privilege <i>Manage</i> on the object type <i>All Pages</i>	<ul style="list-style-type: none"> ■ Page privileges on all pages ■ Tab privileges on all tabs ■ Item privileges on all items
Page group privilege <i>Manage All</i>	<ul style="list-style-type: none"> ■ Page privileges on all pages in the page group ■ Tab privileges on all tabs in the page group ■ Item privileges on all items in the page group ■ Template privileges on all templates in the page group ■ Style privileges on all styles within the page group

Table 17–1 (Cont.) Privileges that Include the Assignment of Privileges

Privilege	Power of Assignment
Page privilege <i>Manage</i>	<ul style="list-style-type: none"> ■ Page privileges on the managed page and any of its sub-pages that inherit their privileges from the managed page ■ Tab privileges on the managed page and any of its sub-pages that inherit their privileges from the managed page ■ Item privileges on the managed page and any of its sub-pages that inherit their privileges from the managed page ■ Style privileges on the managed page and any of its sub-pages that inherit their privileges from the managed page <p>For users with the page privilege <i>Manage Style</i> to change the style of a page, the option Allow Privileged Users To Manage Page Style must also be selected for the page group.</p> <p>The template-level option Enable Pages To Use Different Style controls whether page designers can specify different style settings for pages based on the template.</p>
Tab privilege <i>Manage</i>	<ul style="list-style-type: none"> ■ Tab privileges on the tab and its sub-tabs ■ Item privileges on tab and its sub-tabs ■ Style privileges on the tab and its sub-tabs <p>For users with the tab privilege <i>Manage Style</i> to change the style of a tab, the option Allow Privileged Users To Manage Page Style must also be selected for the page group.</p> <p>If a tab is based on a template, users with the tab privilege <i>Manage Style</i> may not be able to control the style of the tab. The template-level option Enable Pages To Use Different Style controls whether page designers can specify different style settings for the tab.</p>
Item privilege <i>Manage</i>	<ul style="list-style-type: none"> ■ Item privileges on the item and its sub-items

For a list and description of all privileges, from page groups to items, see [Appendix B, "Page Group Object Privileges"](#).

17.3 Granting Global Privileges

Users or groups who create page groups must have at least the global privilege *Create* on the object type *All Page Groups*. Portal administrators are usually the ones to grant such high-level privileges.

Use global privileges to grant a user or group a certain level of privileges on all objects of a particular type, on portal database providers, and on tasks pertaining to portal administration.

Note: Global privileges confer a great deal of power on the user or group to whom they are granted. As a result, such privileges should be granted very cautiously and only to users or groups who truly require them. There should be only a small number of users with global privileges.

Grant global privileges to users in the Portal User Profile portlet. Grant global privileges to groups in the Portal Group Profile portlet. In a default installation of Oracle Portal, both of these portlets are located on the **Portal** sub-tab of the **Administer** tab of the Portal Builder page.

Note: The Portal User Profile portlet is visible only to users with the global privilege *Manage* or *Edit* on the object type *All User Profiles*. The Portal Group Profile portlet is displayed to all users, but only the owner of a group or users with the global privilege *Manage* or *Edit* on the object type *All Group Profiles* can edit a group profile.

This section describes how to assign global privileges to a user or a group. It contains the following sub-sections:

- [Section 17.3.1, "Granting Global Privileges to a User"](#)
- [Section 17.3.2, "Granting Global Privileges to a Group"](#)

17.3.1 Granting Global Privileges to a User

To grant global privileges to a user:

1. Log in to Oracle Portal.
2. Click the **Administer** tab to bring it forward.
3. Click the **Portal** sub-tab.
4. In the **Name** field of the **Portal User Profile** portlet, enter the name of the user to whom to grant global privileges.

Optionally, click the **Browse Users** icon to select a user from a list.

By default, the Portal User Profile portlet is located on the Portal sub-tab of the Administer tab on the Portal Builder page. If you do not find it there, speak to the person who installed your portal.

Note: The Portal User Profile portlet is visible only to users with global privilege *Manage* or *Edit* on the object type *All User Profiles*.

5. Click the **Edit** button.
6. Click the **Privileges** tab to bring it forward.
7. Grant privileges relating to page groups, portal database providers, and portal administration.

Users or groups who create page groups must have at least the global privilege *Create* on the object type *All Page Groups*.

8. Click **Apply** to save your changes and remain on the Privileges tab, or click **OK** to save your changes and return to the Portal User Profile portlet.

For more information about global privileges, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

17.3.2 Granting Global Privileges to a Group

To grant global privileges to a user:

1. Log in to Oracle Portal.
2. Click the **Administer** tab to bring it forward.
3. Click the **Portal** sub-tab.
4. In the **Name** field of the **Portal Group Profile** portlet, enter the name of the group to whom to grant global privileges.

Optionally, click the **Browse Groups** icon to select a group from a list.

By default, the Portal Group Profile portlet is located on the Portal sub-tab of the Administer tab on the Portal Builder page. If you do not find it there, speak to the person who installed your portal.

Note: The Portal Group Profile portlet is displayed to all users, but only the owner of a group or users with the global privilege *Manage* or *Edit* on the object type *All Group Profiles* can edit a group profile.

5. Click the **Edit** button.
6. Click the **Privileges** tab to bring it forward.
7. Grant privileges relating to page groups, portal database providers, and portal administration.

Users or groups who create page groups must have at least the global privilege *Create* on the object type *All Page Groups*.

8. Click **Apply** to save your changes and remain on the Privileges tab, or click **OK** to save your changes and return to the Portal Group Profile portlet.

For more information on global privileges, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

17.4 Securing Page Groups

Page group privileges are granted on the **Access** tab of page group properties.

To grant privileges on a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group on which to grant privileges.
4. Click the **Configure** link.
5. On the resulting page, click the **Access** tab to bring it forward.
6. In the **Grantee** field, enter the name of a user or group.

Optionally, click the **Browse Users** or **Browse Groups** icon to select a user or group from a list.

7. Select a privilege from the drop-down list. Choose from:

- Manage All
- Manage Classifications
- Manage Templates
- Manage Styles
- View

These privileges are described in detail in [Appendix B, "Page Group Object Privileges"](#).

Though you cannot select multiple privileges to grant at one time, after you click **Add**, you can repeat the process, select the same user or group, and grant another privilege. In this way, you can grant a general privilege, such as *View*, to a group, then a higher-level privilege, such as *Manage All*, to a user who is also a member of the group.

8. Click **Add**.

The assignment displays in the Change Access section, where you can revise the grant to a greater or lesser privilege level, or remove the grant entirely.

Note: When you change access privileges, click the **Clear Cache** link at the bottom of the Access tab to make such changes take effect immediately.

17.5 Securing Pages

When you want users to have privileges on pages, it sometimes takes more than granting a specific privilege. For example, users may have the page privilege *Manage Style*, but they cannot apply styles to pages unless the page group option **Allow Privileged Users To Manage Page Style** is also selected.

This section guides you through the process of granting privileges on pages. It includes the following sub-sections:

- [Section 17.5.1, "Making a Page Available to Everyone"](#)
- [Section 17.5.2, "Granting Privileges on a Page"](#)
- [Section 17.5.3, "Caching and Security"](#)

17.5.1 Making a Page Available to Everyone

By making a page public, you allow all users to view your page, even users who are not logged on. Users who are not logged on are called *public users*. If you do not make your page available to everyone, only users with the page privilege *View* or higher are able to view the page.

Making a page available to public users enables public as well as privileged users to view the page. If you want to enable users and groups to manage, personalize, or add content to the page, you must grant them additional privileges.

To make a page available to everyone:

1. Log in to Oracle Portal.

2. Go to the page to be made public.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Switch to **Edit** mode.
4. Click the **Page: Properties** link in the page toolbar.
5. Click the **Access** tab to bring it forward.
6. Select **Display Page To Public Users**.

For this option to display, page access must be set to **Specify Access Settings**. If page access is set to **Inherit Access Settings from Page <page_group_name>**, you do not see the option **Display Page To Public Users**.

Note: Any page with the option **Display Page To Public Users** enabled becomes a crawlable data source for Oracle Ultra Search. See also *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

7. Click **OK** to save your change and return to the page.

Changing the access settings of a Portal Template affects all pages that are based on that template, unless the template allows different access settings. This means that when you set access on a Portal Template for pages to *public*, all pages based on the template are public, unless the template allows the pages based on it to have their own access settings. The control for allowing different access settings for pages that are based on a template is on the Access tab of the template's Properties page: **Enable Pages To Have Different Access**.

17.5.2 Granting Privileges on a Page

You can specify who has access to a page and how much access they have. Access privileges work incrementally, starting at the global privilege level. For example, you can grant the global privilege *View* on the object type *All Pages* to group *A*, then explicitly grant the *Manage* privilege on a particular page to user *A3*. All members of group *A* can see the page, but the only group *A* member who can do everything else to the page is user *A3*.

With respect to page access and personalization, it may help to consider two versions of a page: an individual user's version, and the version displayed to all users with access. If you manage the page, you control the extent to which other users can personalize the page: whether they can modify the display version, their own private version, or nothing at all.

If a page is based on a template, page managers may not be able to control the access and style of the page. There are two options at the template level that control whether page designers can specify different style and access settings for pages based on the template: **Enable Pages To Have Different Access** and **Enable Pages To Use Different Style**. These must be selected; otherwise, the page access and style settings cannot be changed.

To control access to a page:

1. Log in to Oracle Portal.
2. Go to the page where you will control access.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

3. Switch to **Edit** mode.
4. Click the **Page: Properties** link in the page toolbar.
5. Click the **Access** tab to bring it forward.
6. Select **Enable Item Level Security** to allow item creators to specify access control for individual items in the page.
 - If you select this check box, item creators have the choice of inheriting access control from the page, or specifying access control for individual items.
 - If you do not select this check box, all the items on the page inherit access control from the page.

This option is available only if the page is a Standard page, or is a custom page that is based on the Standard page type.

For more information, see [Section 17.9.1.1, "Understanding Item Level Security"](#)

7. To explicitly grant privileges to users or groups:
 - a. In the **Grantee** field, enter the name of the user or group to whom to grant page access.

Optionally, click the **Users** or **Groups** icon, and select from the list provided.

Note: Oracle Portal uses the Oracle Internet Directory for identity management, serving as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (for example, John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal's locally defined groups.

- b. Choose a privilege level from the list.

Note: For a list and description of page privileges, see [Appendix B, "Page Group Object Privileges"](#). The order of the list of privileges is irrelevant. Privileges higher on the list are not necessarily more or less powerful.

- c. Click **Add**.

Though you cannot select multiple privileges to grant at one time, after you click **Add**, you can repeat the process, select the same user or group, and grant another privilege. In this way, you can grant a general privilege, such as *View*, to a group, then a higher-level privilege, such as *Manage All*, to a user who is also a member of the group.

8. To clear all the Web Cache entries for the page, click **Clear Cache**.

The next time the page is requested, it is retrieved from the database, not the cache.

For example, if you revoke a user's privileges on the page, the user will still be able to access the page if it is in the cache. If you want to make sure that your changes are applied immediately, clear the page from the cache by clicking this link.

9. Click **OK** to save your changes and return to the Page.

Use the Privilege list under Change Access to change a user or group's privilege level. Click the **Delete** icon to remove the user's or group's privileges entirely.

Changing the access settings of a Portal Template affects all pages that are based on that template, unless the template allows page designers to use different access settings for the pages that are based on it. The control to allow pages to have different access is on the Access tab of the template's Properties page: **Enable Pages To Have Different Access**.

17.5.3 Caching and Security

The option you select for page, portlet, or template caching can have security implications. Any option that includes caching at the system level retrieves the same data from a single cache source for all users. For this reason, everything on the page (that is not hidden) is displayed to all users who are authorized to view the page. This includes links normally viewed only by users authorized to view the link. However, users can still perform only those actions for which they have the appropriate access privileges. When they click a link to a page, tab, item, or task which they are not authorized to view or to execute, they see an error message and cannot open the link's target or execute the link's action.

Portlets with content that is not generally public that are cached at the system level may not display. For example, objects in the Page Groups portlet typically display according to the privilege-level of the user viewing the portlet. If you did not create a page group and you have no privileges on it, you likely will not see it displayed in the Page Groups portlet. Such objects are not "public." If you cache the Page Groups portlet at the system level, your users are unlikely to see it when the portlet's container page is rendered.

To prevent exposing the access point of sensitive data to unprivileged users, and to avoid the display of portlets without content, consider selecting a page or template caching option that does not include caching at the system level.

This will have performance implications for the speed at which pages are rendered. If you place a high value on performance, consider instead placing such sensitive content on a page with limited access, rather than including sensitive, secure content with more widely accessible content.

For a description of caching options for templates, pages, and portlet instances, see [Chapter 21, "Improving Page Performance"](#).

17.6 Securing Tabs

You can secure a tab by granting privileges on it or by locking its regions. Region locking is described in [Section 17.8, "Locking Regions"](#). To grant privileges on a tab, you must have at least the tab privilege *Manage* on the tab. Use tab privileges to

control who can access a tab, add content to it, manage the style that is applied to it, or personalize their own view of the tab.

Use tab access privileges to grant a *greater* level of access to a tab than users or groups may have on the page that hosts the tab. For example, a user may have the page privilege *View* on a page but the tab privilege *Manage* on a tab on the page. The user can merely view the page, but can add content, grant access, and perform any other management task on the tab. You cannot use tab access privileges to grant a lesser level of access to a tab that users or groups have on the page that hosts the tab. A user's page or page group level privileges always override privileges at the tab level.

To grant privileges on a tab:

1. Log in to Oracle Portal.
2. Go to the page that contains the tab on which to grant access privileges.
For information on how to locate a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Switch to **Edit** mode.
4. Click the **Edit Tab** icon on the tab on which to grant access privileges ([Figure 17–2](#)).

Figure 17–2 The Edit Tab icon



Be sure to click the Edit Tab icon on the tab flap and not the one beside the flap.

5. Click the **Access** tab to bring it forward.
6. Under Access Setting, select a means of specifying tab access; choose from:
 - **Inherit Access Settings from the Template**—This option displays when the page hosting the tab is based on a template. This selection assigns the tab the same access privileges as are granted on the tab on the template on which this page is based.
If you select this option, go to step 13.
 - **Inherit Access Settings from Page <Page Name>**—This selection assigns the tab the same access privileges as are specified for the tab's parent page or a sub-tab's parent (main) tab.
If you select this option, go to step 13.
 - **Specify Access Settings**—This selection enables you to specify access settings for the tab. When you select this option, the **Access Properties** and **Grant Access** sections display on this page. If these sections do not automatically appear, click **Apply**.
The rest of this procedure describes the steps you take when you select **Specify Access Settings**.
7. Select or clear the **Display Tab to Public Users** check box.
 - Select to allow all users, even those who are not logged in, to view this tab.
 - Clear to limit the display of this tab to authenticated users.

8. Select or clear the **Enable Item Level Security** check box.
 - Select to enable privileged users to define access privileges on individual items on this tab. When item level security is enabled, a user must have at least the item privilege *View* on the item in order to view it.
 - Clear to prevent the setting of access privileges on items on this tab.
9. Under **Grant Access**, click the **Browse Users** or **Browse Groups** icon to select a user or group on whom to grant access privileges on the tab.

Note: Oracle Portal uses the Oracle Internet Directory for identity management, serving as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (for example, John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal’s locally defined groups.

10. Select a privilege from the associated drop-down list.

Choose from:

- Manage
- Manage Content
- Manage Style
- Manage Items With Approval

Approvals and notifications must be enabled for the page’s page group for the page privilege *Manage Items With Approval* to display. For more information, see [Section 5.4, "Setting Up Approvals"](#).

- Personalize Portlets (Full)
- Personalize Portlets (Add-Only)
- Personalize Portlets (Hide-Show)
- Personalize (Style)
- View

All of these privileges are explained in detail in [Appendix B, "Page Group Object Privileges"](#).

11. Click **Add** after defining each user or group’s privilege.

Though you cannot select multiple privileges to grant at one time, after you click **Add**, you can repeat the process, select the same user or group, and grant another privilege. In this way, you can grant a general privilege, such as *View*, to a group, then a higher-level privilege, such as *Manage All*, to a user who is also a member of the group.

12. Once you have granted privileges, click the **Clear Cache** link.

This will clear away any obsolete privileges on this tab that linger in the cache.

13. Click **OK** to save your changes and return to the page.

17.7 Securing Portlets

Portlet security consists of three major areas of functionality:

- **Authentication**

When users first access a secure URL, they must be challenged for information that verifies their identity, such as a user name and password, or a digital certificate.

- **Authorization**

Authorization is the process that allows certain users to access parts of an application. Some parts of an application may have public access while others may be accessible only to a limited number of authenticated users.

- **Communication Security**

Communication security is the means by which Oracle Portal establishes the authenticity of communications (for example, messages) to and from portlet providers. In a heavily networked environment, it is critical to verify that communications are authenticated.

This section explores portlet security related to authorization. It contains the following subsections:

- [Section 17.7.1, "Granting Global Privileges on Portlets"](#)
- [Section 17.7.2, "Granting Personalization Privileges on Portlets"](#)

You will find a more in-depth discussion of portlet security, including Authentication, Authorization, and Communication Security, in *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

17.7.1 Granting Global Privileges on Portlets

The procedure for granting global privileges to a user is outlined in [Section 17.3.1, "Granting Global Privileges to a User"](#). The procedure for granting global privileges to a group is outlined in [Section 17.3.2, "Granting Global Privileges to a Group"](#). This section lists and describes the global privileges relating to portlets. It includes the following subsections:

- [Section 17.7.1.1, "Portlet-Related Global Privileges on All Portlets"](#)
- [Section 17.7.1.2, "Portlet-Related Global Privileges on All Providers"](#)
- [Section 17.7.1.3, "Portlet-Related Global Privileges on All Portal DB Providers"](#)

Note: Global privileges confer a great deal of power on the user or group to whom they are granted. As a result, such privileges should be granted very cautiously and only to users or groups who truly require them. There should be only a small number of users with global privileges.

17.7.1.1 Portlet-Related Global Privileges on All Portlets

The portlet-related global privileges that apply to all portlets include:

- **None**—No global privileges are granted on portlets.
- **Manage**—Create, edit, or delete any portlet in any provider.
- **Edit**—Edit any portlet in any provider.
- **Execute**—Execute any portlet in any provider. Users and groups with this privilege can see all portlets, even when portlet security is enforced. The **Show** link appears in the Portal Navigator for all portlets. To view portlets through the Portal Navigator, drill down through the providers listed under the Providers tab.
- **Access**—View any portlet in any provider.
- **Publish**—Publish any page portlet, navigation page, or Portal DB provider portlet to the portal. Publishing a portlet makes it available for adding to pages.

17.7.1.2 Portlet-Related Global Privileges on All Providers

The portlet-related global privileges that apply to providers of portlets include:

- **None**—No global privileges are granted on providers.
- **Manage**—Register, edit, and de-register any provider, as well as display and refresh the Portlet Repository. Users and groups with this privilege are also allowed to grant edit privileges on any provider.
- **Edit**—Edit any registered provider.
- **Publish**—Register and de-register any provider.
- **Execute**—View the portlets of any provider.
- **Create**—Create portlet providers. Users and groups have the *Manage* privilege on any provider they create. This means they can perform all manage operations (such as edit and de-register) on any provider they create.

17.7.1.3 Portlet-Related Global Privileges on All Portal DB Providers

The portlet-related global privileges on all Portal DB providers include:

- **None**—No global privileges are granted on portlets.
- **Manage**—Edit, delete, or export any Portal DB provider. Create, edit, delete, or export any portlet in any Portal DB provider. Grant access to any Portal DB provider and any portlet in any Portal DB provider.
- **Edit Contents**—Edit or export any portlet in any Portal DB provider.
- **View Source**—View the PL/SQL package specification and body and run any portlet in any Portal DB provider. This privilege is intended primarily for users or groups who may want to look at a portlet's source to understand how to call it.
- **Personalize**—Personalize any portlet from any Portal DB provider.
- **Run**—Run any portlet in any Portal DB provider.
- **Create**—Create Portal DB providers. Users and groups with this privilege can edit, delete, and export the providers they create, and they can create, edit, delete, and export any portlet in any provider.

17.7.2 Granting Personalization Privileges on Portlets

Many personalization privileges can be granted on portlets at the global level, the page level, and the tab level. When personalization privileges are granted at the global level, users with such privileges can use them on every portlet in the portal. When

personalization privileges are granted at the page level, users with such privileges can use them on every portlet on the page. When personalization privileges are granted at the tab level, users with such privileges can use them on every portlet on the tab, though not on other portlets on the page that contains the tab.

In most cases, personalizations affect only the view of the user who makes them. A portlet must be edited, rather than personalized, before changes display to all users viewing the portlet.

An exception to this is when the portlet instance is shared. Provided users have sufficient privileges to edit a page, they can share a portlet instance to make their view of a portlet, along with all of its personalizations, available to other users. Shared portlet instances are available for selection under the Shared Portlets page in the Portlet Repository. The sharing option is available on pages, though not on pages that are based on Portal Templates. For more information, see [Section 15.7, "Sharing a Portlet Across Multiple Pages"](#).

Granting global access privileges on a portal is discussed in [Section 17.3, "Granting Global Privileges"](#). Granting access privileges on a page is discussed in [Section 17.5, "Securing Pages"](#). Granting access privileges on a tab is discussed in [Section 17.6, "Securing Tabs"](#). This section lists and describes portlet-related access privileges for the portal, for pages, and for tabs.

Global-, page-, and tab-related privileges pertaining to portlet personalizations include:

- The global privilege *Personalize* on the object type All Portal DB providers
Users with this privilege can personalize their view of any portlet in the portal.
- The page or tab privilege *Personalize Portlets (Full)*
Users with this privilege can alter their view of the page by adding portlets to the page, and deleting, moving, hiding, or showing any portlet on the page. Additionally, such users can change the style applied to their view of the page. Personalization changes are visible only to the user who makes them. For example, if a user with this privilege deletes a portlet from a page, the portlet will nonetheless continue to display on other users' views of the page. Likewise, if a user with this privilege adds a portlet to a page, only that user sees the portlet; it does not display when other users view the page.

For users with this privilege to change the style applied to their view of a page, the option **Allow Privileged Users To Personalize Page Style** must be selected for the page group. This option is available on the Main tab of page group properties.
- The page or tab privilege *Personalize Portlets (Add-Only)*
Users with this privilege can alter their view of the page by adding portlets to the page, and removing, hiding, or showing the portlets that they add. Additionally, such users can change the style applied to their view of the page.

For users with this privilege to change the style applied to their view of a page, the option **Allow Privileged Users To Personalize Page Style** must also be selected for the page group. This option is available on the Main tab of page group properties.
- The page or tab privilege *Personalize Portlets (Hide-Show)*
Users with this privilege can alter their view of the page by hiding, showing, or rearranging any portlet on the page. Additionally, such users can change the style applied to their view of the page. These changes are visible only to the user who

made them. For example, if a user with this privilege hides a portlet on a page, that portlet is hidden only for that user; other users still see the portlet.

For users with this privilege to change the style applied to their view of a page, the option **Allow Privileged Users To Personalize Page Style** must also be selected for the page group. This option is available on the Main tab of page group properties.

17.8 Locking Regions

Region locking is a way to limit the types of actions users can perform on a region. This section describes the effect of locking a region and how to lock page regions and Portal Template regions. It contains the following subsections:

- [Section 17.8.1, "Locking a Page Region"](#)
- [Section 17.8.2, "Locking a Portal Template Region"](#)

17.8.1 Locking a Page Region

Once you lock a page region, when users *personalize* the page they cannot add content to the region or hide, show, delete, or move existing content. When users *edit* the page, they can still add, hide, show, delete, and move content.

To lock a page region:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant page.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Pages** in the Layout & Appearance section, click the link to the page on which to lock a region.

This opens the page in Edit mode.

5. Click the **Edit Region** icon in the region to be locked ([Figure 17–3](#)).

Figure 17–3 The Edit Region Icon



6. On the resulting page, go to the **Region Content** section, and clear the check box **Enable Users To Include Content In This Region**.
7. Click **OK** to save your changes and return to the page.

17.8.2 Locking a Portal Template Region

When you lock a Portal Template region, no user can change the region content on pages that are based on the template (except through WebDAV; see note). When users edit or personalize a page that is based on a template with locked regions, they will not be able to add content to the region, or hide, show, delete, or move existing content.

Note: If a default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To lock a Portal Template region:

1. Log in to Oracle Portal.
2. Click the Build tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the relevant Portal Template
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Under **Portal Templates** in the Layout & Appearance section, click the link to the relevant template.
This opens the template in Edit mode.
5. Click the **Edit Region** icon in the region to be locked (Figure 17-4).

Figure 17-4 The Edit Region Icon



6. On the resulting page, go to the **Region Content** section, and clear the check box **Enable Users To Include Content In This Region**.
7. Click **OK** to save your changes and return to the Portal Template.

17.9 Securing Items

Oracle Portal provides two powerful features for securing items: item level security and approvals. Item level security enables you to shield an item from unprivileged users or to grant higher access privileges on an item than might otherwise be granted on the page or tab that contains the item. Approvals enable you to structure an approval process through which new and revised content must pass before it can be published to your portal.

This section describes item level security and approvals and provides pointers on how to use these features. Additionally, it provides a table that outlines item URL access rules for items in various states, such as *Draft*, *Pending*, *Unpublished*, and so on. It contains the following subsections:

- [Section 17.9.1, "Using Item Level Security"](#)
- [Section 17.9.2, "Using Approvals to Pre-Screen Items"](#)
- [Section 17.9.3, "Item URL Security"](#)

Note: To enable item level security, you must have at least the page or tab privilege *Manage* on the page or tab that contains the item.

17.9.1 Using Item Level Security

Item level security provides a means of:

- Preventing unprivileged users from seeing an item
For example, when item level security is enabled and a user has the page privilege *View* but no item privileges, the user can view the page but not its items.
- Granting a higher level of privilege on the item than is granted on the page
For example, if a user has the page privilege *View* on a page, but the item privilege *Manage* on an item on the page, the user can enter page edit mode and perform content management tasks on that specific item. Such a user cannot perform any other editing tasks on the page.

Item level security can be applied to items placed on pages, tabs, and pages that are based on a Portal Template; though it cannot be applied (successfully) to items that are part of the template itself—even when item level security is turned on for the template and the user has privileges on the item.

The following sections further define item level security and describe how to enable it on a page or a tab. It includes the following subsections:

- [Section 17.9.1.1, "Understanding Item Level Security"](#)
- [Section 17.9.1.2, "Enabling Item Level Security on a Page"](#)
- [Section 17.9.1.3, "Enabling Item Level Security on a Tab"](#)
- [Section 17.9.1.4, "Enabling Item Level Security on a Portal Template"](#)
- [Section 17.9.1.5, "Changing Item Access"](#)

17.9.1.1 Understanding Item Level Security

By default, items inherit the access settings that apply to the page or tab that contains the item. Only users or groups who are authorized to access a given page or tab can access its items. When you enable item level security for a page or tab, items initially use the same security settings that are applied to the page or tab. But, using item level security capabilities, you can now grant a higher level of access on individual items.

When item level security is enabled, users with no privileges on the item cannot see the item.

The page privileges *Manage* and *Manage Content* override item level security privileges. This means that if you grant the item privilege *View* to a user who also has the page privilege *Manage Content*, the user can do anything to the item, more than just viewing it. However, item level security takes precedence over *other* page-level privileges.

For example, if a user has the page privilege *Manage Style* on a page, and the item privilege *Manage* on an item, the user can delete the item from the page, and is not limited to merely changing the page's style.

Item level security can be enabled only on Standard pages and custom pages that are based on the Standard page type.

Note: There is no relationship between item level security and item versioning. Item level security has to do with who can access an item, and item versioning has to do with how older versions of an item are handled as newer versions are uploaded. For more information on item versioning, see [Section 14.12, "Using Item Version Control"](#).

Changes to the access settings of a Portal Template affect all pages that are based on the template, unless the template specifically allows the pages that are based on it to use different access settings. The option to allow pages based on templates to define their own access is located on the **Access** tab of Portal Template properties.

17.9.1.2 Enabling Item Level Security on a Page

To enable item level security on a page:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet's **Work In** drop-down list, select the page group that owns the page on which to enable item level security.

In a typical installation, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under the **Pages** heading in the **Layout & Appearance** section, click the page on which to enable item level security.

This opens the page in Edit mode.

5. Click the **Access** link in the page toolbar.
6. On the resulting page, go to the **Access Properties** section and select **Enable Item Level Security**.
7. Click **OK** to return to the page.

This enables item creators to set access controls for individual items on the page. Item creators have the choice of inheriting access controls from the page or setting specific access controls for individual items.

17.9.1.3 Enabling Item Level Security on a Tab

To enable item level security on a tab:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet's **Work In** drop-down list, select the page group that owns the tab on which to enable item level security.

In a typical installation, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under the **Pages** heading in the **Layout & Appearance** section, click the page that contains the relevant tab.

This opens the page in Edit mode.

5. Go to the tab on which to enable item level security.
6. Click the **Edit Tab** icon ([Figure 17-5](#)).

Figure 17–5 The Edit Tab Icon

Be sure to click the Edit Tab icon on the tab flap and not the one beside the tab.

7. On the resulting page, click the **Access** tab to bring it forward.
8. Go to the **Access Settings** section, and select **Specify Access Settings**.
9. In the **Access Properties** section, select **Enable Item Level Security**.

This enables item creators and item owners to grant access privileges on individual items on the tab. Item creators have the choice of inheriting access controls from the tab or granting access privileges on each item on the tab.

17.9.1.4 Enabling Item Level Security on a Portal Template

To enable item level security on a Portal Template:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet's **Work In** drop-down list, select the page group that owns the Portal Template on which to enable item level security.

In a typical installation, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under the **Portal Templates** heading in the **Layout & Appearance** section, click the template on which to enable item level security.

This opens the page in Edit mode.

5. Click the **Access** link in the toolbar at the top of the template.
6. On the resulting page, go to the **Access Properties** section and select **Enable Item Level Security**.
7. Click **OK** to return to the page.

17.9.1.5 Changing Item Access

As a content contributor, you can decide if you want to grant additional access to an item to selected users or groups. You can grant access on one item or on multiple items simultaneously. This section provides information on both actions. It includes the following subsections:

- [Section 17.9.1.5.1, "Changing Access on One Item"](#)
- [Section 17.9.1.5.2, "Changing Access on Multiple Items Simultaneously"](#)

Note: To grant access privileges on an item, you must have at least the item privilege *Manage* on the item.

17.9.1.5.1 Changing Access on One Item To grant access privileges on one item:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.

3. From the Page Group portlet's **Work In** drop-down list, select the page group that owns the page that contains the item on which to grant access privileges.

In a typical installation, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under the **Pages** heading in the **Layout & Appearance** section, click the page that contains the item on which to grant access privileges.

This opens the page in Edit mode.

5. Locate the relevant item, and click the Actions icon beside the item (Figure 17-6).

Figure 17-6 The Actions Icon



Note: For Page Link items, even if users have item level privileges on the item, they will not see the item if they do not have access to the target page.

6. On the resulting page, click the **Access** link.
7. In the **Item Level Security** section, select **Define Item Level Access Privileges**.

Two additional sections display: **Grant Access** and **Change Access**. For some older versions of browsers, such as Netscape 4.x browsers, you may have to click **Apply** to make the additional sections display.

Note: If you select **Inherit Parent Page Access Privileges**, the item has the same access privilege as was set for the parent page.

If the item has multiple versions, the access setting is applied to all versions of the item, not just the one that you are editing.

8. In the **Grant Access** section, enter the name of the user or group to whom to assign privileges.

Click the **Browse Users** icon to display a list of existing users or the **Browse Groups** icon to display a list of existing groups.

Note: Adding a group saves time when you want to grant the same access privilege to multiple users.

9. From the privilege drop-down list, select an item level privilege to grant to the specified user or group.

Note: For a list and description of item-level privileges, see [Appendix B, "Page Group Object Privileges"](#).

10. Click **Add**.

Grantees and their privilege levels display in the **Change Access** section. In this section, you can choose a different item-level privilege, or revoke item privileges from users or groups.

11. Repeat steps 8 through 10 for each relevant user or group.
12. When you are done, click **OK**.

Note: Oracle Portal uses the Oracle Internet Directory for identity management. The Oracle Internet Directory serves as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (such as John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal’s locally defined groups.

Item level security cannot be disabled for items in the Portlet Repository page group.

If a user is a member of two different groups with different privileges on the same item, the user is not limited by the lesser privilege. For example, if one group has the item privilege *Edit*, and another group has the item privilege *Manage*, and you belong to both groups, you can both view and manage the item.

To revoke the user or group's access, click the Delete icon next to the Grantee Name under Change Access.

17.9.1.5.2 Changing Access on Multiple Items Simultaneously Use the Actions list in List view of page Edit mode to change access settings on multiple items simultaneously. For these actions to be taken, item level security must first be enabled on the page, tab, or template where you will perform the action. For more information, see [Section 17.9.1, "Using Item Level Security"](#).

To change access settings on multiple items simultaneously:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Group portlet’s **Work In** drop-down list, select the page group that owns the page that contains the items on which to change access privileges.

In a typical installation, the Page Groups portlet is located on the Build tab of the Portal Builder.

4. Under the **Pages** heading in the **Layout & Appearance** section, click the page that contains the items on which to change access privileges.

This opens the page in Edit mode.

5. Click the **List** link in the toolbar at the top of the page.

This displays the page in List view of page Edit mode.

6. Select the check boxes next to the items to be changed.
7. From the **Actions** drop-down list, select one of the following options, and click **Go**:
 - **Modify Item Access Settings**

Select this option to modify the access settings of the checked items. Once you click **Go**, the **Bulk Action: Modify Item Access Settings** screen displays:

 - Use the **Item Selections** section to identify the items on which to modify item access settings.

Select **Specified Item Level Access**, to act on items that have individually defined access settings. Click the **Revoke All** link to revoke all access privileges currently applied to these items.

Select **Items Inheriting From Parent Page**, to act on items that inherit their access settings from the page on which they are placed.
 - Under **Grant Access**, assign privileges to the selected items as desired. For more information, see steps 8 through 12 of [Section 17.9.1.5.1, "Changing Access on One Item"](#).
 - Click **Close** when finished.
 - **Do not Inherit Item Access Settings**

Select this option to specify that the specified items do not inherit their access settings from the page or tab on which they are placed. Click **Go**, then click **OK** in the resulting confirmation dialog.
 - **Inherit Item Access Settings from Parent**

Select this option to specify that the specified items inherit their access settings from the page or tab on which they are placed. Click **Go**, then click **OK** in the resulting confirmation dialog.

17.9.2 Using Approvals to Pre-Screen Items

Approvals enable you to delegate the addition and revision of portal content without relinquishing control over what is actually displayed to your users. Approval-related features of particular interest are:

- A defined approval process
- The page privilege *Manage Items With Approval* (or the global privilege of the same name on the object type *All Pages*)
- Item drafts

This section describes these features and points you to relevant information in other chapters in this guide.

For any of these features to be meaningful, you must first enable Approvals and Notifications on the Configure tab of page group properties (see [Section 5.4.2, "Enabling Approvals and Notifications for a Page Group"](#)). Once approvals are enabled, you can define an approval process, grant the page privilege *Manage Items With Approval*, and enable item drafts for a page group or (if allowed) a page.

Approval processes can reduce the costs of a paper-driven office in which hard-copy documents requiring approvals, such as expense reports and travel requests, create bottlenecks for your workers. When you define approval processes, you allow the appropriate people in your organization to receive notification of pending items

requiring approval, to review the items, and to approve or reject the items, all from your company's portal.

By default, approval processes are defined at the page group level. If the page group is configured to allow pages to have their own approval processes, approval processes can be defined as well at the page level. Both page groups and pages provide a place to define an approval process on the Approval tab of their properties pages. For more information, see [Chapter 20, "Setting Up an Approval Chain"](#).

When a user with the page privilege *Manage Items With Approval* uploads or revises content, the content is submitted to a defined approval process where it can be reviewed and passed for publication or rejected. Keep in mind, however, if you have users with the page privilege *Manage Items with Approval*, and no approval process is defined, this privilege is equivalent to the page privilege *Manage Content* in relation to items. In other words, such users are able to publish items that have not been through an approval process. For information on granting privileges on pages, see [Section 17.5.2, "Granting Privileges on a Page"](#). For additional information on approvals, see [Chapter 20, "Setting Up an Approval Chain"](#).

You can also configure a page group to support item drafts. When the draft feature is enabled, content developers can upload items to the portal without exposing them until the content developers are ready to submit the items for approval. This is because draft items do not display to most users when a page is viewed. (To find out which users can view items in what state, see [Section 17.9.3, "Item URL Security"](#).) When the page is in Edit mode, users can see draft items in Pending Items Preview or List view, where such items are clearly labeled as drafts.

Content developers can upload draft content, placing it where they want it to display on the page, but preventing it from general display until they change its draft status. When the draft is finalized, the contributor can change its status, either to *Active* or to *Pending*, depending on whether an approval process is in place and the contributor is required to submit items for approval. Keep in mind that, once enabled, the Draft option cannot be disabled until all draft items are switched to active status or submitted for approval.

The option to enable drafts is located on the Approval tab of page or page group properties. Approvals must be enabled for the draft feature to be enabled, although drafts do not necessarily require approval. Approvals can be enabled without there being a defined approval process. This makes it possible to enable drafts for everyone without ultimately requiring that their finalized content be approved. For information on enabling item drafts, see [Chapter 20, "Setting Up an Approval Chain"](#).

17.9.3 Item URL Security

[Table 17-2](#) outlines the access rules that apply to URLs for items in various states, such as *Draft*, *Pending*, *Unpublished*, and so on. Additionally, it discusses these states under three scenarios:

- Access through the portal
- Access through WebDAV
- Access through a search

Note: In addition to an item's status, and the avenue through which the item is accessed, caching options can affect item access. For more information, see [Chapter 21, "Improving Page Performance"](#).

References to *content managers* refer to anyone with the appropriate manage privilege when item level security is enabled. Manage privileges can mean:

- The global privilege *Manage All* on the object type *All Page Groups*
- The global privilege *Manage* on the object type *All Pages*
- The global privilege *Manage Content* on the object type *All Pages*
- The global privilege *Manage Items With Approval* on the object type *All Pages*
- The page privilege *Manage*
- The page privilege *Manage Content*
- The page privilege *Manage Items With Approval*
- The item privilege *Manage*

Table 17-2 Item URL Security

Item State	Access Through Portal	Access Through WebDAV	Access Through Search
DRAFT	Content managers and draft creator can access/view the item.	<p>Users with the page or global privilege <i>Manage Items With Approval</i> can see the item and work on it.</p> <p>Users with the item privilege <i>Manage</i> can see the item with a size of 0 KB. Such users cannot update or view the item.</p> <p>Users with the item privilege <i>View</i> do not see the item.</p>	Draft items are not returned for any user. Even the <i>Manage Item With Approval</i> users who added the item in Draft mode.
PENDING	Content managers, item creator/updater, and approvers can access/view the item.	<p>Users with the item privilege <i>Manage</i> can see the pending item with a size of 0 KB.</p> <p>The user who submitted the item can see it with the actual size.</p> <p>Users with the item privilege <i>View</i> can see the pending item with a size of 0 KB. This is to enable a view of the reserved name space.</p>	Pending items are not returned for any user.
UNPUBLISHED	<p>Content managers and users with the page or global privilege <i>Manage Items With Approval</i> can access/view the item.</p> <p>If the item uses Item Level Security, users who have the item privilege <i>Manage</i> on the item can access/view the item.</p>	<p>The item is not visible to users with the item privilege <i>View</i>.</p> <p>Content managers see the item if the option Display Unpublished, Expired, and Deleted Items In Edit Mode is selected in page group properties.</p>	Unpublished items are not returned for any user.

Table 17-2 (Cont.) Item URL Security

Item State	Access Through Portal	Access Through WebDAV	Access Through Search
NONCURRENT VERSION	<p>If the item is <i>Active</i>, anyone with privilege to see the page can see the item.</p> <p>If the page is <i>Public</i>, all users can access/view the item through the draft URL.</p> <p>If the item uses Item Level Security, users who have the item privilege <i>Manage</i> on the item can access/view the item.</p> <p>If the item is <i>Expired</i> or <i>Deleted</i>, only the content manager can access/view the noncurrent version.</p>	The current version is always displayed.	The current version is always returned.
HIDDEN	<p>The item is accessible through the item URL by anyone with sufficient privilege to see the page.</p> <p>If the item uses Item Level Security, users who have the item privilege <i>View</i> on the item can access/view the item.</p> <p>If the page is <i>Public</i>, anyone can view the item content.</p>	<p>The item is not visible to user with the item privilege <i>View</i>.</p> <p>The item is visible to users with the page or global privilege <i>Manage</i> or <i>Manage Items With Approval</i>.</p>	Hidden items are not returned for any user.
EXPIRED	<p>Content managers can access/view the expired item.</p> <p>If the item uses Item Level Security, users who have the item privilege <i>Manage</i> on the item can access/view the item.</p>	<p>The item is not visible to users with the item privilege <i>View</i>.</p> <p>Content managers see the item if the option Display Unpublished, Expired, and Deleted Items In Edit Mode is selected in page group properties.</p>	Expired items are not returned for any user.
DELETED	<p>Content managers can access/view the deleted item.</p> <p>If the item uses Item Level Security, users who have the item privilege <i>Manage</i> on the item can access/view the item.</p>	<p>The item is not visible to users with the item privilege <i>View</i>.</p> <p>Content managers can see the item if the option Display Unpublished, Expired, and Deleted Items In Edit Mode is selected in page group properties.</p>	Deleted items are not returned for any user.

17.10 Granting Privileges on Styles

Style privileges are available at the global level and for page groups, pages, and tabs. [Table 17-3](#) lists and describes the privileges relating to styles at each of these privilege levels.

Note: Granting a privilege at the global level is discussed in [Section 17.3, "Granting Global Privileges"](#). Granting a privilege at the page group level is discussed in [Section 17.4, "Securing Page Groups"](#). Granting a privilege at the page level is discussed in [Section 17.5, "Securing Pages"](#). Granting a privilege at the tab level is discussed in [Section 17.6, "Securing Tabs"](#).

Table 17–3 Privileges Relating to Styles

Privilege	Description
The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i>	<p>Perform any task on any page group. This privilege supersedes any other privilege in the other page group global privileges. For example, this also allows managing of any style. Such users can take any action on any style in the portal.</p> <p>This user is the manager for all page groups.</p>
The global privilege <i>Manage Styles</i> on the object type <i>All Page Groups</i>	<p>Create, edit, and delete any style in any page group.</p> <p>Such users can take any action on any style in the portal. Note, however, that this privilege does not include the power to apply a style.</p>
The global privilege <i>Create</i> on the object type <i>All Page Groups</i>	<p>Create page groups, and create any page group object in those page groups. Users and groups with this privilege can also edit and delete the page groups and page group objects they create. They cannot create objects in page groups they did not create.</p> <p>Such users can take any action on any style in the page groups that they create.</p>
The global privilege <i>Manage Style</i> on the object type <i>All Pages</i>	<p>Apply an available or new style to any page in any page group. Create, edit, and delete new styles. Allows editing of only those styles created by the user; one user cannot modify or delete another user's styles.</p>
The global privilege <i>Personalize Portlets (Full)</i> on the object type <i>All Pages</i>	<p>Personalize any page in any page group to add, show, hide, delete, move, or rearrange portlets. Personalize any page to show, hide, delete, or rearrange tabs, or add tabs to existing tabbed regions. Personalize any page in any page group to use a different style.</p> <p>Such users can change the style for their view of any page in any page group.</p>
The global privilege <i>Personalize Portlets (Add-only)</i> on the object type <i>All Pages</i>	<p>Personalize any page in any page group to add portlets or add tabs to existing tabbed regions. Users and groups with this privilege can also delete the portlets they add. Personalize any page in any page group to use a different style.</p> <p>Such users can change the style for their view of any page in any page group.</p>
The global privilege <i>Personalize Portlets (Hide-Show)</i> on the object type <i>All Pages</i>	<p>Personalize any page in any page group to show or hide portlets or tabs. Personalize any page in any page group to use a different style. Arrange portlets in any page in any page group.</p> <p>Such users can change the style for their view of any page in any page group.</p>
The global privilege <i>Personalize (Style)</i> on the object type <i>All Pages</i>	<p>Personalize any style in any page group.</p> <p>Such users can change the style for their view of any page in any page group.</p>
The global privilege <i>Manage</i> on the object type <i>All Styles</i>	<p>Create, edit, and delete any style in any page group.</p> <p>For users with this privilege to change the style of a page, the option Allow Privileged Users To Manage Page Style must also be selected for the page group. For users of this privilege to personalize their view with a different page style, the page group option Allow Privileged Users To Personalize Page Style must be enabled for the page group that contains the relevant page. These options are available on the Main tab of page group properties.</p>
The global privilege <i>View</i> on the object type <i>All Styles</i>	<p>View any style in any page group.</p>
The global privilege <i>Publish</i> on the object type <i>All Styles</i>	<p>Make any style in any page group public for other users to use.</p>
The global privilege <i>Create</i> on the object type <i>All Styles</i>	<p>Create styles in any page group. Users and groups with this privilege can also edit and delete the styles they create.</p> <p>Users must have additional privileges on specific page groups, pages, or tabs to apply the styles they create.</p>

Table 17–3 (Cont.) Privileges Relating to Styles

Privilege	Description
The global privilege <i>Edit</i> on the object type <i>All Group Privileges (profiles)</i>	Edit any group portal profile (setting the default style, default home page, and default mobile home page).
The page group privilege <i>Manage All</i>	Users with this privilege can perform any task within the page group. The <i>Manage All</i> privilege includes all other page group privileges: <i>Manage Classifications</i> , <i>Manage Templates</i> , <i>Manage Styles</i> , and <i>View</i> . A user with this privilege is called the <i>page group administrator</i> .
The page group privilege <i>Manage Styles</i>	Users with this privilege can create, edit, and delete any style in the page group, and can change the style applied to any page in the page group. A user with this privilege can also view any page in the page group.
The page and tab privilege <i>Manage</i>	For users with this privilege to change the style of a page, the option Allow Privileged Users To Manage Page Style must be selected for the page group. This allows users to apply a different style when editing the page. If this option is not selected at the page group level, only users with the page group privilege <i>Manage All</i> can apply a different style to the page. This option is available on the Main tab of page group properties. There is a second option for controlling styles at the page group level called Allow Privileged Users To Personalize Page Style . When this option is selected, users with at least the page privilege <i>Personalize (Style)</i> can apply a different style when personalizing the page. This option is available on the Main tab of page group properties. If a page is based on a template, users with this privilege may not be able to control the access and style of the page. There are two options at the template level, Enable Pages To Have Different Access and Enable Pages To Use Different Style , that control whether page designers can specify different access and style settings for the page. These options must be selected; otherwise, the page access and style settings cannot be changed by users with this privilege.
The page and tab privilege <i>Manage Style</i>	Users with this privilege can change the style and region properties of the page. For users with this privilege to change the style of a page, the option Allow Privileged Users To Manage Page Style must also be selected for the page group. This option is available on the Main tab of page group properties. If a page is based on a template, users with this privilege may not be able to control the style of the page. The template-level option Enable Pages To Use Different Style controls whether page designers can specify different style settings for the page. This option must be selected; otherwise, the page's style settings cannot be changed by users with this privilege. This privilege is not available for mobile pages.
The page and tab privilege <i>Personalize Portlets (Full)</i>	Users with this privilege can alter their view of the page by changing the style of the page, adding portlets to the page, and deleting, moving, hiding, or showing any portlet on the page. For users with this privilege to change the style of a page, the option Allow Privileged Users To Personalize Page Style must be selected for the page group. This option is available on the Main tab of page group properties. These changes are visible only to the user who made them. For example, if a user with this privilege deletes a portlet from a page, other users still see that portlet on their version of the page. Likewise, if a user with this privilege adds a portlet to a page, only that user sees the portlet; other users do not.

Table 17–3 (Cont.) Privileges Relating to Styles

Privilege	Description
The page and tab privilege <i>Personalize Portlets (Add-Only)</i>	<p>Users with this privilege can alter their view of the page by changing the style of the page, adding portlets to the page, and deleting, hiding, or showing the portlets that they add.</p> <p>For users with this privilege to change the style of a page, the option Allow Privileged Users To Personalize Page Style must also be selected for the page group. This option is available on the Main tab of page group properties.</p> <p>These changes are visible only to the user who made them. For example, if a user with this privilege adds a portlet to a page, only that user sees the portlet; other users do not.</p>
The page or tab privilege <i>Personalize Portlets (Hide-Show)</i>	<p>Users with this privilege can alter their view of the page by changing the style, and hiding, showing, or rearranging any portlet on the page.</p> <p>For users with this privilege to change the style of a page, the option Allow Privileged Users To Personalize Page Style must also be selected for the page group. This option is available on the Main tab of page group properties.</p> <p>These changes are visible only to the user who made them. For example, if a user with this privilege hides a portlet on a page, that portlet is hidden only for that user; other users still see the portlet.</p>
The page or tab privilege <i>Personalize (Style)</i>	<p>Users with this privilege can apply a different style to their view of the page.</p> <p>For users with this privilege to change the style applied to their view of a page, the option Allow Privileged Users To Personalize Page Style must also be selected for the page group. This option is available on the Main tab of page group properties.</p> <p>These changes are visible only to the user who made them. For example, if a user with this privilege personalizes a page by applying a different style, other users do not see this change.</p> <p>If a page is based on a template, users with this privilege may not be able to control the style of the page. The template level option, Enable Pages To Use Different Style, controls whether page designers can specify different style settings for the page. The option to enable pages to use a different style must be selected, otherwise, the page's style settings cannot be changed by users with this privilege.</p> <p>This privilege is not available for mobile pages.</p>

17.11 Granting Privileges on Portal Templates

When you grant privileges on a Portal Template for pages, you are controlling access to the pages that are based on the template, rather than on the template itself. When you grant privileges on a Portal Template for items, you are controlling access to the template, its tabs, and its items—depending on the level of security applied.

This section discusses how to grant access privileges on Portal Templates for pages and Portal Templates for items. It also lists and describes the privileges that provide some level of template management access. It includes the following subsections:

- [Section 17.11.1, "Granting Access to Portal Templates for Pages"](#)
- [Section 17.11.2, "Granting Access to Portal Templates for Items"](#)
- [Section 17.11.3, "Template-Related Privileges"](#)

To define template access privileges, you must have the global privilege *Manage* on the object type *All Page Groups* or the page group privilege *Manage Templates* or higher on the page group.

17.11.1 Granting Access to Portal Templates for Pages

Granting access on a Portal Template for pages means setting security controls that affect all pages that are based on the template. For Portal Templates for pages, the Access tab enables you to control access to the pages that are based on this template, but not on the template itself.

You can grant access only on Portal Templates and not on HTML Templates.

Note: To grant access privileges on a template, you must have at least the page group privilege *Manage Templates* on the page group that owns the template.

To make a Portal Template available for use in a page group, the option **Make available for use in this page group** must be selected on the Main tab of template properties.

To grant access privileges on a Portal Template for pages:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the template on which to grant access privileges.

In default installations of Oracle Portal, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Portal Templates** in the Layout & Appearance section, click the Portal Template on which to grant access.

This opens the template in Edit mode.

5. Click the **Access** link in the toolbar at the top of the template.
6. Select **Enable Pages to Have Different Access** to enable users with sufficient privileges to choose different access control settings when they create or edit pages that are based on the template.

Clear this check box to prevent users from choosing different access control settings when they create or edit pages that are based on this template. Such pages will always use the template access control settings.

7. Select **Display Page to Public Users** to enable all users to view pages that are based on this template—even users who are not logged on.

Clear this check box to limit the display of pages that are based on this template to users who have explicitly been granted access.

Any rendered page with this option enabled becomes a crawlable data source for Oracle Ultra Search. This means if the page that is based on this template uses the template's access settings, and this option is enabled on the template, the page is available for a crawl initiated through Oracle Ultra Search. See also, "Registering Oracle Portal as a Content Source," in the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

8. Select **Enable Item Level Security** to enable item creators to specify access control settings for individual items on pages that are based on this template.
 - If you select this check box, item creators can choose to inherit access control from the template or specify access control for individual items.

- If you do not select this check box, all the items on the template inherit access control from the template.
9. Under the Grant Access section, define access settings for individual users and groups:

- a. In the **Grantee** field, select a user or group.

Browse for user or group names by clicking the Browser Users or Browser Groups icons.

Note: Oracle Portal uses the Oracle Internet Directory for identity management. The Oracle Internet Directory serves as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (such as John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal's locally defined groups.

- b. In the next (access privilege) field, select the level of privilege to grant to the user or group selected in the Grantee field.

For an explanation of the listed privileges, see [Appendix B, "Page Group Object Privileges"](#).

- c. Click the **Add** button.

Once you grant a privilege, a Change Access section displays. Use this section to revise or revoke privileges.

10. If you are changing template access, once you have redefined access privileges click the **Clear Cache** link in the Cache Invalidation section.

11. Click the **Finish** button.

The template displays in Edit mode.

Oracle Portal provides options for overriding template style and access settings. These are useful for allowing privileged users to select a style or set access rules other than those used by the template for a page that is based on the template.

To use this option for styles, select **Enable Pages To Use Different Style** on the Style tab of template properties. To use this option for access settings, select **Enable Pages to Have Different Access** on the Access tab of template properties. This option is available for Portal Templates for pages, but not for Portal Templates for items.

17.11.2 Granting Access to Portal Templates for Items

Granting access to a Portal Template for items means setting security controls on the template itself. Portal Templates for items are rendered dynamically when a link to an item that uses the template is clicked, so any access controls you set on the template apply to every rendered version of the template.

To view a page that is dynamically assembled using a Portal Template for items, one of the following conditions must be met:

- The template must be public.
- The user must have at least the *View* privilege on the template.
- The user must have the page group privilege *Manage Template* on the page group that owns the template.

To grant access privileges on a Portal Template for items:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the template on which to grant access privileges.

In default installations of Oracle Portal, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Portal Templates** in the Layout & Appearance section, click the Portal Template for items on which to grant access.

This opens the template in Edit mode.

5. Click the **Access** link in the toolbar at the top of the template.
6. Select **Display Page to Public Users** to enable all users to view this template—even users who are not logged on.

When this option is selected, users can see all template content, provided the content is not further restricted by access rules on template tabs or items. When tabs or items have their own access rules, users will need specific privileges on the template tabs or items.

Clear this check box to limit the display of this template to users who have explicitly been granted access.

7. Select **Enable Item Level Security** to enable item creators to specify access control settings for individual items on the template:
 - If you select this check box, item creators can choose to inherit access control from the template or specify access control for individual items.
 - If you do not select this check box, all the items on the template inherit access control from the template.
8. Under the Grant Access section, define access settings for individual users and groups:
 - a. In the **Grantee** field, select a user or group.
Browse for user or group names by clicking the Browser Users or Browser Groups icons.

Note: Oracle Portal uses the Oracle Internet Directory for identity management. The Oracle Internet Directory serves as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (such as John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal's locally defined groups.

- b. In the next (access privilege) field, select the level of privilege to grant to the user or group selected in the Grantee field.

For an explanation of the listed privileges, see [Appendix B, "Page Group Object Privileges"](#).

- c. Click the **Add** button.

Once you grant a privilege, a Change Access section displays. Use this section to revise or revoke privileges.

9. If you are changing template access, once you have redefined access privileges click the **Clear Cache** link in the Cache Invalidation section.

10. Click the **Finish** button.

The template displays in Edit mode.

For information about setting access privileges on tabs, see [Section 17.6, "Securing Tabs"](#). For information about setting access privileges on items, see [Section 17.9, "Securing Items"](#).

17.11.3 Template-Related Privileges

You can grant privileges related to templates at the global level, the page group level, and the page level. Such privileges apply to both Portal Templates and HTML templates. This section lists and describes these privileges.

Note: For information about granting privileges at the global level, see [Section 17.3, "Granting Global Privileges"](#). For information about granting privileges at the page group level, see [Section 17.4, "Securing Page Groups"](#).

For more information about templates, see [Chapter 12, "Providing a Standard Look and Feel"](#).

[Table 17-4](#) lists and describes the types of privileges that provide access to templates.

Table 17–4 Privileges Relating to Templates

Privilege	Description
The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i>	Perform any task on any page group. This privilege supersedes any other privilege in the other page group global privileges. For example, this also allows managing of any page. This user is the manager for all page groups, and by extension, the manager of all templates.
The global privilege <i>Manage Templates</i> on the object type <i>All Page Groups</i>	Create, edit, and delete any Portal Template or HTML template in any page group. Grant access to any template.
The global privilege <i>Manage Classifications</i> on the object type <i>All Page Groups</i>	Create, edit, and delete any category, perspective, custom attribute, custom page type, or custom item type in any page group.
The global privilege <i>Manage</i> on the object type <i>All Pages</i>	Create, edit, personalize, or delete any page in any page group. Grant access to any page in any page group. This privilege includes the ability to apply templates to all pages.
The global privilege <i>Create</i> on the object type <i>All Pages</i>	Create sub-pages in any page group. Users and groups with this privilege can also edit and delete the sub-pages they create. To use this privilege to create sub-pages, a user must have the page privilege <i>Manage</i> on the parent page under which sub-pages are created. This privilege includes the ability to apply templates to pages the user creates.
The page group privilege <i>Manage All</i>	A user with this privilege can perform any task within the page group. The <i>Manage All</i> privilege includes all other page group privileges: <i>Manage Classifications</i> , <i>Manage Templates</i> , <i>Manage Styles</i> , and <i>View</i> . A user with this privilege is called the <i>page group administrator</i> .
The page group privilege <i>Manage Classifications</i>	A user with this privilege can create, edit, and delete any category, perspective, attribute, custom item type, and custom page type in the page group.
The page group privilege <i>Manage Templates</i>	A user with this privilege can create, edit, and delete any template in the page group. A user with this privilege must also have the page group privilege <i>View</i> to view pages in this page group. A user with this privilege can delete a tab on a template only if other users have not placed their own content on it on pages that are based on the template or if the user also has content management privileges on the pages that are based on the template.
The page privilege <i>Manage</i>	This privilege enables users to apply a template to the page(s) they manage. This privilege carries with it many other capabilities. For more information, see Appendix B, "Page Group Object Privileges" .

17.12 Granting Content Attribution Privileges

Content attribution includes page group objects such as:

- Categories
- Perspectives
- Item Types
- Page Types
- Attributes

You can find privileges for creating or taking action on these objects at the global and page group levels. At more focussed levels, such as page, tab, and item, you can use

these objects—for example, you can apply a category to a page—but you cannot act on them.

This section provides information about the privileges that carry with them the power to act on objects related to content attribution.

Note: For information on granting privileges at the global level, see [Section 17.3, "Granting Global Privileges"](#). For information on granting privileges at the page group level, see [Section 17.4, "Securing Page Groups"](#).

Table 17–5 lists and describes the privileges relating to content attribution.

Table 17–5 Privileges Relating to Content Attribution (Categories, Perspectives, Object Types, and so on)

Privilege	Description
The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i>	Perform any task on any page group. This privilege supersedes any other privilege in the other page group global privileges. For example, this also allows managing of any page. This user is the manager for all page groups.
The global privilege <i>Manage Classifications</i> on the object type <i>All Page Groups</i>	Create, edit, and delete any category, perspective, custom attribute, custom page type, or custom item type in any page group. This privilege includes the ability to edit category and perspective templates that are generated automatically when a category or a perspective is created.
The global privilege <i>Create</i> on the object type <i>All Page Groups</i>	Create page groups, and create any page group object in those page groups. Users and groups with this privilege can also edit and delete the page groups and page group objects they create. They cannot create objects in page groups they did not create.
The page group privilege <i>Manage All</i>	A user with this privilege can perform any task within the page group, including creating any page group object. The <i>Manage All</i> privilege includes all other page group privileges: <i>Manage Classifications</i> , <i>Manage Templates</i> , <i>Manage Styles</i> , and <i>View</i> .
The page group privilege <i>Manage Classifications</i>	A user with this privilege can create, edit, and delete any category, perspective, attribute, custom item type, and custom page type in the page group. A user with this privilege can also edit the templates used for the categories and perspectives in the page group. A user with this privilege must also have the page group privilege <i>View</i> to view pages in this page group. Users with this privilege cannot delete item or page types they have created if the portal contains items or pages based on the type. Such users must first obtain privileges on the items and pages.

17.13 Troubleshooting Page and Object Security Issues

The Privileges tab does not display on the Edit Portal Users Profile page

The portal administrator may have run the script `serlacl.sql` to enforce role-based security. Role-based security limits privilege grantees to groups; users cannot be selected for privilege assignment. The script does not affect privileges granted to users before it was run, only after. You may also note that the *Browse Users* icon does not appear next to the *Grantee* field on *Access* tabs.

For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

The Browse Users icon does not display on the Access tab

See the previous entry.

I have the page privilege *Manage Style*, but I cannot apply a style.

It is not enough to have the *Manage Style* privilege on a page. The page group option **Allow Privileged Users To Manage Page Style** must also be selected for the page's page group. For more information, see [Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page"](#).

I restricted access to a particular tab to a specific user or group, but other users can still view it.

Tab level access is overridden by page group level access settings. To prevent users from seeing content on a specific tab, you must make sure that they do not have higher privileges on the containing page group.

I tried to disable item drafts, but could not.

Once enabled, the Draft option cannot be disabled until all draft items are switched to active status or submitted for approval.

The Style tab does not display.

If the page is based on a template, and template access is set up to prevent users from applying styles to pages that are based on the template, the Style tab cannot be accessed in the page properties of pages based on the template.

Part VI

Advanced Page Design Features

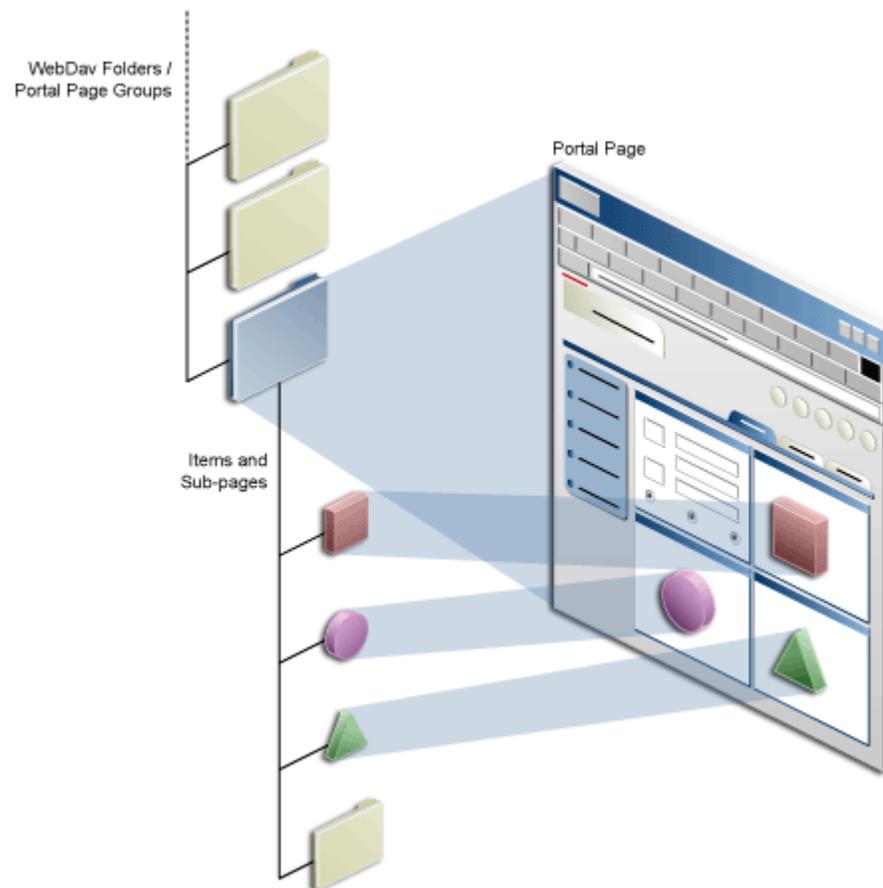
Part VI contains the following appendixes:

- [Chapter 18, "Using WebDAV Clients with Oracle Portal"](#)
- [Chapter 19, "Translating Portal Content"](#)
- [Chapter 20, "Setting Up an Approval Chain"](#)
- [Chapter 21, "Improving Page Performance"](#)
- [Chapter 22, "Using Parameters and Events"](#)

Using WebDAV Clients with Oracle Portal

In any enterprise, documents are frequently spread across many different data sources. To make the information accessible and easy to find, the ideal solution is to save the data in one central content repository, such as the one provided by Oracle Portal. But how do you move and publish distributed content into your portal? For simple, distributed, low-volume file transfer, you can map the Portal schema in the Oracle Metadata Repository as a Web Folder (Figure 18-1).

Figure 18-1 Pages and Content in WebDAV and Oracle Portal



Oracle Portal supports the use of a Web-based Distributed Authoring and Versioning protocol (WebDAV). Using a WebDAV client, such as Web Folders, you can manage your portal content re-creating your computer's file system. Drag and drop files

between your desktop and your portal page groups. Move content between page groups. Move content between source repositories and the Portal schema in the MDS Repository. For example, you can mount both the Oracle Files repository and the Portal schema in the MDS Repository repository through a Web folder, and exchange files. Perform in-place opening, editing, and saving of portal content using WebDAV-compliant desktop applications, such as Microsoft Office 2000.

Using WebDAV clients with Oracle Portal takes full advantage of the portal's content management capabilities. It enables users to manage content through their file systems while respecting the content structure and access rules specified for the portal.

For example, you can access the Portal schema in the MDS Repository through a WebDAV client, such as Oracle Drive. Connect as a particular user. And create a Zip archive starting from the page group's root page. This operation respects the access rules established for the portal—only the logged-in user's content is copied to the archive. And it respects the portal structure by maintaining the WebDAV folder hierarchy of the targeted page group.

This chapter provides guidance on which WebDAV client to use in different situations and describes how you can access Oracle Portal through some of them. It suggests things to consider when performing supported tasks, such as viewing, copying, moving, and deleting content, and supported functions, such as item versioning. It includes the following main sections:

- [Section 18.1, "When to Use Which WebDAV Client with Oracle Portal"](#)
- [Section 18.2, "Setting Up Oracle Portal for WebDAV"](#)
- [Section 18.3, "Setting Up Your WebDAV Client"](#)
- [Section 18.4, "General Rules for Using a WebDAV Client"](#)
- [Section 18.5, "Using Oracle Drive as a WebDAV Client"](#)
- [Section 18.6, "Using Web Folders as a WebDAV Client"](#)
- [Section 18.7, "Using Cadaver as a WebDAV Client"](#)
- [Section 18.8, "Using Sitecopy as a WebDAV Client"](#)
- [Section 18.9, "Using Dreamweaver as a WebDAV Client"](#)
- [Section 18.10, "Using Microsoft Office as a WebDAV Client"](#)
- [Section 18.11, "Example: Using Web Folders to Add Content to a Portal Page"](#)
- [Section 18.12, "Example: Using Microsoft Office 2000 to Edit Portal Page Content"](#)
- [Section 18.13, "Example: Using Dreamweaver to Edit Portal Page Content"](#)
- [Section 18.14, "Troubleshooting WebDAV Issues"](#)

Issues relating to WebDAV and translation are discussed in [Chapter 19, "Translating Portal Content"](#).

Intended Audience

The content of this chapter is intended for users who are logged on as an authenticated user with the page privilege *Manage Content*. If a particular task requires a different privilege, the required privilege is listed before the task steps.

18.1 When to Use Which WebDAV Client with Oracle Portal

You'll find support for WebDAV in Java clients (such as DAV Explorer), open source tools (such as Cadaver and Sitecopy), Apple GUI tools (such as Goliath), and

commercial authoring tools (such as Macromedia Dreamweaver and Adobe Photoshop).

Different situations respond optimally to different tools, for example:

- **Oracle Drive** is a powerful WebDAV client that maps the Portal schema in the MDS Repository as a drive and enables you to perform desktop authoring and publishing and portal-specific metadata attribution directly from the Windows desktop.

Unlike with other WebDAV clients, with Oracle Drive you can use any Microsoft application, including Notepad, to edit and view portal content—not just those enabled for WebDAV.

Oracle Drive provides extended menu options that enable you to jump straight into the context of the portal user interface to carry out the selected menu action.

You can use Oracle Drive with Oracle Portal 9.0.4.1 or later. No additional configuration is required on the Oracle Application Server middle tier, infrastructure, or Metadata Repository.

- **Microsoft Web Folders** is available out-of-the-box in Windows. It is useful to portal content contributors. Web Folders enables users to map the Portal schema in the MDS Repository like a Windows drive, edit documents in-place with WebDAV-compliant applications, and save them directly to the Portal schema in the MDS Repository. Because the Portal schema in the MDS Repository displays as a folder hierarchy in Windows Explorer, users can perform common content-contributor tasks, such as copy, move, or delete file, without any additional knowledge.

For more information about using Web Folders or Network Places, see [Section 18.6, "Using Web Folders as a WebDAV Client"](#).

- **Cadaver** is similar to an FTP or telnet client. Use commands like `put` and `get` to upload and download files. You can copy, move, and delete content just as you would using telnet. Cadaver is available on the UNIX operating system.

For more information about Cadaver, see [Section 18.7, "Using Cadaver as a WebDAV Client"](#).

- **Sitecopy** is ideal for performing script-based bulk operations on the Portal schema in the MDS Repository. You can replicate file system directory structures to Oracle Portal and portal page structures to the file system. Choose Sitecopy if you plan to replicate other WebDAV-compliant repositories into the Portal schema in the MDS Repository automatically.

Use Sitecopy to move hundreds or even thousands of files from a file system or external repository into a Portal schema in the MDS Repository. Sitecopy can greatly improve transfer efficiency for one-time bulk copy and move operations of large file volumes or periodic copy and move operations between source repositories and Portal Repositories.

For more information about Sitecopy, see [Section 18.8, "Using Sitecopy as a WebDAV Client"](#).

Note: You cannot use a WebDAV client to add an item that has the same name as an item with the status of *Pending*. This is because it is seen as trying to edit the pending item. You can use the portal user interface to add an item that has the same name as a pending item. This is because it is seen as adding a different item. The new item is created with a unique name.

For information on which users can view items in what state, see [Section 17.9.3, "Item URL Security"](#).

18.2 Setting Up Oracle Portal for WebDAV

WebDAV is configured on both the server side (in Oracle Portal) and the client side (your personal computer). This section provides information on setting up a WebDAV client on the client side as well as specifying some WebDAV defaults within Oracle Portal.

Oracle Portal has a configuration file (`oradav.conf`) that contains OraDAV parameters. When Oracle Fusion Middleware is installed, all required OraDAV parameters are set with values that enable access to Oracle database content through a Web browser or a WebDAV client. If necessary, the portal administrator can modify parameter values if the default values do not meet your portal's needs.

If you are a portal administrator and would like detailed information about the `oradav.conf` file and how to modify OraDAV parameters, refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

Additionally, there are options within the Oracle Portal user interface that you can set in advance to prepare the way for uploading content through a WebDAV client. This section provides information on these options. It includes the following subsections:

- [Section 18.2.1, "Specifying Default Item Types for Zip and WebDAV Uploads"](#)
- [Section 18.2.2, "Selecting a Target Region for Content Added Through WebDAV"](#)

18.2.1 Specifying Default Item Types for Zip and WebDAV Uploads

When users add files to a portal page using an unzip operation or a WebDAV client (for example, Web Folders, Cadaver, or Dreamweaver), the process provides no intrinsic way of notifying the portal of the uploaded files' types. To address this, Oracle Portal provides a simple way of predetermining the item types of files that are uploaded through an unzip operation or through WebDAV clients. It provides a page property called **Default WebDAV Item Types**, located on the Items tab of page properties.

Note: For information about item types, see [Section 5.2.2, "Working With Item Types"](#) and [Section 18.4.4, "How WebDAV Handles Item Types and Attributes"](#).

Some of the useful applications of this feature include:

- If the other items in your page use specific custom item types, you might want to make sure that items added with WebDAV clients also use those custom item types.

- You may want to choose *Zip File* as the default WebDAV item type for Zip files that are added with a WebDAV client. Doing so will enable users to extract Zip files within the portal.
- If you want users to be able to download Zip files from a portal, but not to extract them into the portal, you might choose *File* as the default WebDAV item type for Zip files.

Default WebDAV Types can be specified on a page-by-page basis in your portal, although the default for portal sub-pages is to inherit these settings from the parent page. On a page group's root page (which has no parent page), the default value is *File* for regular files, *Zip File* for Zip files, and *File* for image files.

To specify default WebDAV item types:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the page on which to set default WebDAV file types.

In default installations, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Under **Layout & Appearance**, go to the **Pages** section, and click the name of the page on which to set default WebDAV file types.

This opens the page in Edit mode.

5. In the page toolbar, click the **Page: Properties** link.
6. Click the **Items** tab to bring it forward, and go to the **Default WebDAV Types** section (Figure 18–2):

Figure 18–2 Default WebDAV Types Section with Specific Selections

Default WebDAV Types

Choose the item types that you want to use for files added to this page using WebDAV. For example, you can choose to have all zip files added as Zip File items rather than Simple File items so that they can be unzipped within the page.

Default Regular Files	<input type="text" value="File"/>
Default Zip Files	<input type="text" value="Zip File"/>
Default Image Files	<input type="text" value="Image"/>

- From the **Default Regular Files** list, choose the item type to assign to regular files (for example, documents) that are uploaded to a portal page through a WebDAV client.
- From the **Default Zip Files** list, choose the item type to assign to Zip files that are uploaded to a portal page through a WebDAV client.
- From the **Default Image Files** list, choose the item type to assign to image files that are uploaded to a portal page through a WebDAV client.

The item types that display on the default WebDAV item types lists include only those file-based item types that are available in the page group. The page group administrator determines which item types are available in a page group. Of the available item types, only file-based item types (that is, standard and custom variations of File, Image, Image Map, and Zip File) display on these lists.

If the page group does not contain any file-based item types, all WebDAV uploads to the page group fail with a 403 `Forbidden` error. A check of the `MY_ERROR_LOG.TXT` log file will indicate the cause.

For sub-pages, choose **Inherit from Parent Page** when you want to use the same default WebDAV item types as the page's parent page (Figure 18–3).

Figure 18–3 Default WebDAV Types Section Set to Inherit From Parent Page

Default WebDAV Types

Choose the item types that you want to use for files added to this page using WebDAV. For example, you can choose to have all zip files added as Zip File items rather than Simple File items so that they can be unzipped within the page.

Default Regular Files	<input type="text" value="Inherit From Parent Page - File"/>
Default Zip Files	<input type="text" value="Inherit From Parent Page - Zip File"/>
Default Image Files	<input type="text" value="Inherit From Parent Page - File"/>

7. Click **OK** to save your changes and return to the page.

Note: If you delete an item type from your portal, and that type was one of the Default WebDAV Types selected on the Items tab of page properties, the option that used that type (either Default Regular Files, Default Zip Files, or Default Image Files) is reset to **Inherit from Parent Page - [File/Zip File/Image]**.

If all item types are deleted, users get an error when uploading files. The `MY_ERROR_LOG.TXT` file provides information stating the cause.

When a new page is created, the settings for the property **Default WebDAV Types** is always reset to **Inherit from Parent Page**. With this option selected, changes to the Default WebDAV Types setting on the parent page automatically cascade down to child pages.

This means that even though the parent page has the setting **Default Regular Files** set to *File*, the new page's Default Regular Files will be set to *Inherit from Parent Page*. The result is the same, that is, the new page picks up the value of *File* from the parent page.

Users are free to change the Default WebDAV Types settings on the new child page to, for example, *Image*; though leaving the setting at *Inherit* ensures that any future changes made to the parent's WebDAV defaults are cascaded automatically to the child page.

18.2.2 Selecting a Target Region for Content Added Through WebDAV

Oracle Portal provides the option to identify in advance the item region that should receive any content you upload, move, or copy into your portal through a WebDAV client. The procedure for identifying default regions is explained in [Section 7.8, "Selecting Default Regions for Content Uploads"](#). This section provides additional information about region selection that is particularly relevant to WebDAV.

- The target page must contain at least one item region or one undefined region. If a page has more than one item region, the page designer can specify one of those regions as the default item region through the procedure described in [Section 7.8, "Selecting Default Regions for Content Uploads"](#).
- When you add an item to the page using WebDAV, the item is placed in the page's default item region. If the target page is based on a Portal Template, the default item region is determined by the template's default item region.

If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

- If a default item region has not been specified, the item is placed in the second item region on the page (or the first if there is only one item region). The second item region is used to avoid placing items in a region intended for navigation elements.
- If there are no item regions on the page, the item is placed in the first undefined region on the page (and that undefined region then becomes an item region). If the page is based on a template that contains no item regions, users cannot add content to the page, even if the page contains undefined regions.
- All pages, including those with no item regions, are visible on the WebDAV side. Moving or copying an item into a page with no item or no undefined regions produces an error.
- The default item region applies to new items only. For example, if the default item region for a page changes, and an item on that page is subsequently edited, the item will remain in its current region; it will not be moved to the new default item region.
- Pages created from a WebDAV client automatically include an item region.
- You cannot add items to tabs in pages. If a page consists entirely of tabs, you cannot add items to the page even though it is listed in the WebDAV client.
- You can move and copy *items* across page groups. Copying *pages* across page groups is not supported in Oracle Portal. To perform this action using WebDAV, copy the pages to your local file system (where they display as folders), then copy them from the file system to the target page group. Note, however, that when you move or copy a page in this way, you lose all the associated page and content metadata. This includes such things as custom item attributes, author, dates, version, and the like. Just the file names and item content is preserved.
- In Web Folders, depending on your operating system, you cannot copy an item into the same folder. For example, in Windows 2000, dragging an item from the right pane into the same folder in the left pane will raise an error.

18.3 Setting Up Your WebDAV Client

The steps required to set up a WebDAV client to connect to your portal varies depending on the client. But all clients will eventually request a URL. The WebDAV

URL is very similar to the URL you use to access the portal in your Web browser. It uses the following format:

```
http://<hostname>:<port>/<dav_location>
```

Where `dav_location` is the location as specified in the `oradav.conf` file.

The default portal DAV URL is:

```
http://<hostname>:<port>/dav_portal/portal
```

- The `dav_portal` part of the URL is the default name of a virtual directory that is used to differentiate between portal access through a WebDAV client and portal access through the portal user interface.
- The `portal` part of the URL is the name of the data access descriptor (DAD) of the portal installation. Administrators can also configure virtual hosts to provide a different, simpler, or easier to remember URL for WebDAV access, if need be.

Directly access a particular page group or page by adding its name to the WebDAV URL, for example:

```
http://mymachine.mycompany.com:5000/dav_portal/portal/mypagegroup/mypage
```

You connect to a portal through WebDAV clients using the same user name and password that you use to log in to the portal itself. If the portal is in a hosted environment, you also must add your company information to your user name, as follows:

```
<username>@<company>
```

If you are using Web Folders on Windows 2000, you may be prompted for your user name and password twice: once when you click **Next** after specifying the WebDAV URL, and again when you click **Finish**.

Some WebDAV clients (such as, Windows 2000 or NT) do not support multiple simultaneous logins. If you want to log in as a new user, you must clear your cookies, restart your computer to clear out the current login session, then log in as the new user.

You may need to delete the file `C:\Documents and Settings\<user>\Cookies` from the Command Prompt (that is, DOS). You can do this only when no other processes are using the file.

If your WebDAV client has no explicit logout feature, you must log out of the operating system (such as Windows 2000 or NT) to log out of the portal.

18.4 General Rules for Using a WebDAV Client

Oracle Portal supports a number of WebDAV client actions. Since not all WebDAV clients behave the same way, only a subset of these actions may be allowed for a particular client. For example, you can check items in and out through WebDAV if the WebDAV client supports the WebDAV LOCK method. (Web Folders does not currently support locking operations. Office 2000 clients support *implicit* locking operations. Cadaver and Dreamweaver support *explicit* locking operations.)

Performing actions on your portal through WebDAV clients has the same effect as performing them in the portal itself. If you make a change to your portal from a WebDAV client, it is instantly visible in Oracle Portal, provided the change is not subject to an approval process. You may need to refresh the portal page through your browser to see your changes.

This section describes the actions you can perform on Oracle Portal through a WebDAV client. It includes the following subsections:

- [Section 18.4.1, "Listing Portal Content in a WebDAV Client"](#)
- [Section 18.4.2, "Viewing Content Through a WebDAV Client"](#)
- [Section 18.4.3, "Moving, Copying, and Editing Content Through WebDAV"](#)
- [Section 18.4.4, "How WebDAV Handles Item Types and Attributes"](#)
- [Section 18.4.5, "Versioning Support in WebDAV"](#)
- [Section 18.4.6, "Approvals and Drafts Support in WebDAV"](#)
- [Section 18.4.7, "Deleting Content Through WebDAV"](#)
- [Section 18.4.8, "Checking Content Out and In through WebDAV"](#)
- [Section 18.4.9, "Creating Oracle Portal Pages and Sub-Pages Through WebDAV"](#)
- [Section 18.4.10, "Viewing WebDAV Errors"](#)
- [Section 18.4.11, "Authentication and WebDAV"](#)

18.4.1 Listing Portal Content in a WebDAV Client

Once you are connected to Oracle Portal through WebDAV, all the page groups you have the privilege to see are visible as folders on your local machine's file system. The top-level folders represent the root pages of your portal's page groups.

To see a page group, you must have sufficient portal privileges to view the page group's root page. Additionally, if you have a personal page in the Shared Objects page group, you should see the Shared Objects page group and be able to access your personal page through the WebDAV client.

Only Standard pages are exposed in WebDAV. No other page types are listed, nor are custom pages that are based on the Standard page, type.

When you open a page group folder, you see a list of the next level of sub-pages inside the page group. These display as sub-folders. Similarly, when you open a sub-page folder, you see a list of the sub-page's sub-pages and all items (and sub-items) of the following types:

- File and Simple File
- Image, Simple Image, and Image Map
- Zip File
- Custom types based on the Base File, Base Image, or Base Image Map item types

Note: Referenced image items do not display in the WebDAV list of pages and items. Referenced image items are those images you add by referring to the image's internal name, such as `1614.gif`. Items with a status of *Pending* or *Draft* display to their approvers as 0 KB files.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

To see items in a WebDAV client, you must have at least the page privilege *View* on the page where the item is placed. You will see the current version of the item in the

page group's default language only (that is, the language in which the page group was created). Translations of items are not visible in WebDAV clients.

You see only the primary file associated with each item or sub-item. Any other files (that is, secondary files or images) associated with the item (for example, an item's representative image or icon), do not display in the WebDAV client. If you want to delete or change these files, you must do so in Oracle Portal.

In WebDAV clients, no distinction is made between items and sub-items.

Most unpublished items (that is, expired items, hidden items, and items with a future publish date) are visible in WebDAV clients only to users with at least the page privilege *Manage Content* on the page that contains the item, and only when the page group setting **Display Unpublished Items In Edit Mode** is enabled. Expired items display in the WebDAV client until they are permanently removed (that is, purged) from the database. Items marked for deletion do not display in WebDAV clients, even when the marked items display in one of the portal's Edit mode views.

Whether an item is visible through WebDAV is also influenced by what state the item is in, such as *Pending*, *Draft*, and so on. For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

Oracle Portal is case-sensitive for folder and file-based item names (for example, *aaa.htm* and *AAA.htm* are treated as different items). If your WebDAV client is not case-sensitive (as is the case with Web Folders), *aaa.htm* or *AAA.htm* may not be accessible, or the client may confuse one for the other. Therefore, when using such clients, do not use a naming convention that relies on case.

Renaming a file with a WebDAV client affects the Display Name of the corresponding item only if the Display Name was previously the same (including the same case) as the file Name. For example, if, in the Oracle Portal user interface, the item's Name is *sample.txt*, and its Display Name is also *sample.txt*, when you rename this file through a WebDAV client to *realfile.txt*, both the Name and Display Name are updated to *realfile.txt*. Conversely, if the item's Name is *sample.txt* and its Display Name is *Benefits Information*, when you rename this file through a WebDAV client to *benefits.txt*, only the Name is updated in the portal; the Display Name continues to read *Benefits Information*. This holds true if the Name and Display Name are in different cases. For example, if the Name is *sample.txt* and the Display Name is *Sample.txt*, when you change the Name to *benefits.txt* in a WebDAV client, the Display Name remains *Sample.txt*.

Templates, regions, and tabs are not currently represented in Web folders. This means that when you look at a portal page through a Web folder, you can see the portal page's items and sub-pages, but you cannot see any objects representing a region, a tab, or a template. Further, any items and portlets that are part of a template or that are placed in a tab region are not represented. For this reason, avoid using tabs on pages that are intended for use with WebDAV clients.

Note, however, that if a template is detached from a page, any items from the template are copied to the page itself and therefore become visible in your WebDAV client.

18.4.2 Viewing Content Through a WebDAV Client

Most WebDAV clients allow you to view the content of an item by clicking its file name. In Windows 2000 or NT, the behavior is very similar to clicking a file on the local machine: the operating system opens it in the application associated with the file type.

If you are using a Microsoft Office application to browse portal content, be aware that when you open a file, that file is locked in the WebDAV client and checked out in the

portal. Therefore other users will not be able to edit the file until you have closed it. When you close the file, it is unlocked and checked back in. If versioning is enabled, a new version is created.

Some desktop applications may have difficulty opening files that use special characters in the file name. To avoid such problems, consider limiting the names to alphanumeric characters (A to Z, a to z, 0 to 9), spaces, and underscore (_).

Note: For a summary of Oracle Portal object naming rules, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

18.4.3 Moving, Copying, and Editing Content Through WebDAV

To move, copy, or edit files, you must have at least the page privilege *Manage Content* (or *Manage Items With Approval* if approvals are enabled).

With WebDAV-enabled desktop applications, such as Microsoft Office 2000, you can open a file, edit it directly, and then save it to the same location, using the same name. With other applications, you can save the file to the local file system and drag and drop the new file to Oracle Portal. The next time the file is opened from Oracle Portal, the edited version is displayed.

When a file is moved or copied, the entire item associated with that file is moved or copied, including associated files (for example, the item's icon) and any sub-items. But note that if a sub-item is copied, the copy is created as a top-level item.

When you select multiple files for moving, and these include items and sub-items, you may encounter error messages, and all the files may not be moved. This is because, in a multiple move, the WebDAV client will attempt to move each item in turn. If the parent item is moved first, all of its sub-items are moved with it. Then the client attempts to move the sub-items (one at a time). Because they no longer exist in the source folder, an error message is displayed. Similarly, if the sub-item is moved first, when the client attempts to move the parent item, it displays an error message because it cannot find the parent's associated sub-item.

When you drag a file from one folder to another within Web Folders, and the file already exists in the target folder, then the file being moved will replace the existing file in the target folder. Within your portal, this means the dragged item replaces the existing item on the target page. This will happen irrespective of any versioning setting on that page. That is, even if item versioning is enabled in your portal, all versions will be replaced. To preserve versioning in WebDAV, copy (rather than drag) the file to your local system, then copy it from there to the target folder.

Note: You cannot use a WebDAV client to add an item that has the same name as an item of the status *Pending*. This is because it is seen as trying to edit the pending item. You can use the portal user interface to add an item that has the same name as a pending item. This is because it is seen as adding a different item. The new item is created with a unique Name.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

18.4.4 How WebDAV Handles Item Types and Attributes

Your page designer can specify what item types to use for new files published to Oracle Portal through WebDAV. For example, the page designer might want any Zip

files published to Oracle Portal to be uploaded as *Zip File* item types, so that their content can be extracted into the page group.

If the default item type specified for files uploaded through WebDAV includes the *Category* attribute, new items added through WebDAV clients are assigned to the *General* category. See [Section 18.2, "Setting Up Oracle Portal for WebDAV"](#) for more information.

When you edit or move an existing item using WebDAV, that item retains its original item type and attribute values. Similarly, when you copy an item using WebDAV, the copy uses the item type and attribute values of the original item.

With most WebDAV clients, you cannot edit an item's attributes in Oracle Portal's WebDAV server. To edit attribute values, you must edit the item in Oracle Portal. One exception is Oracle Drive. Oracle Drive provides a right-click menu option, **Set Properties**, that provides access to the Edit Item screen where you can edit item attribute values. For more information about Oracle Drive, see [Section 18.5, "Using Oracle Drive as a WebDAV Client"](#).

Renaming a file with a WebDAV client affects the Display Name of the corresponding item, only when the Display Name was previously the same (including the same case) as the file Name. For example, if the item's Name is *sample.txt* and its Display Name is also *sample.txt*, when you rename this file through a WebDAV client to *realfile.txt*, both the Name and Display Name are updated to *realfile.txt*.

Conversely, if the item's Name is *sample.txt* and its Display Name is *Benefits Information*, when you rename this file through a WebDAV client to *benefits.txt*, only the Name is changed. The Display Name continues to be *Benefits Information*.

This holds true if the Name and Display Name are in different cases. For example, if the Name is *sample.txt* and the Display Name is *Sample.txt*, when you change the Name to *benefits.txt* in a WebDAV client, the Display Name remains *Sample.txt*.

18.4.5 Versioning Support in WebDAV

Oracle Portal's WebDAV server supports a slightly varied model of the Simple and Audit versioning available in the main portal application. For example, when Audit versioning is enabled, all versions are retained as specified, but you cannot see or select a different version to display through a Web folder.

If your page is set up to use Audit Versioning and you use a WebDAV client to edit an item on the page, a new version of the item is created. The new version is always set to the current version. WebDAV folders always display the current item version. If you do not want the new version to be the current version, you must log in to Oracle Portal, and edit the item's version setting.

If Simple Versioning is enabled on a page and you edit an item on that page through a WebDAV client, a new version of the item is created and set to the current version. When you edit items through a WebDAV client, you cannot choose the overwrite versioning option. If you want your versioning model to remove the previous version when you save the file, you must edit the item then upload it through Oracle Portal, rather than through a WebDAV client.

In some clients, for example, Windows 2000, the message you receive when you add a new version of an item may imply that you are overwriting the file rather than adding a new version. This is a limitation of the client's messaging. When Simple or Audit versioning is enabled for a page, saving a file to your portal through the WebDAV client always creates a new version.

When you drag a file from one folder to another within Web Folders, and the file already exists in the target folder, then the file being moved will replace the existing file in the target folder. Within your portal, this means the dragged item replaces the existing item on the target page. This will happen irrespective of any versioning setting on that page. That is, even if item versioning is enabled in your portal, all versions will be replaced. In this scenario, to preserve versioning in WebDAV, copy (rather than drag) the file from the first WebDAV folder to your local system, then copy it from your local system to the target WebDAV folder.

18.4.6 Approvals and Drafts Support in WebDAV

Oracle Portal's WebDAV server also supports approvals and Drafts. With approvals enabled, when you add an item to a page using a WebDAV client, the approval process that was defined for the page or page group is triggered. The content of the item does not display to other users until it has been approved. Users, including approvers, may be able to see the item listed (as a zero-byte file) in the WebDAV client, but they will not be able to see the actual content of the pending item until it has been approved. The item cannot be updated in the WebDAV client until it has been approved or rejected.

With Drafts enabled, you can work on portal files without submitting them to an approval process. When your file is ready for review, you can submit it to the approval process through the Oracle Portal user interface, or through Oracle Drive. For more information about Drafts, see [Section 5.4, "Setting Up Approvals"](#). For more information about Oracle Drive, see [Section 18.5, "Using Oracle Drive as a WebDAV Client"](#).

Note: How a pending item displays in a WebDAV client depends on whether the item is a new item or an edited item. If the item is a new item, in a pending state it displays in WebDAV as a zero-byte file. If the item is a revision of an existing item, the older-unedited version of the item displays in the WebDAV client until the revised version is approved.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

If approvals are enabled, when a user updates an item using a WebDAV client, other users, including approvers, continue to see the non-updated item until such time as the update is approved. Conversely, the user who updated the item sees the updated item in its WebDAV folder, even before it is approved.

This works a little differently when the file is updated through the Oracle Portal user interface. In such a case, all users (including the user who updated the item) will see the non-updated item in WebDAV clients until the updated item is approved.

The point at which the approval process is triggered depends upon the WebDAV client being used. For example, in Microsoft Word, when a file is opened it is automatically locked. The approval process will not be triggered until the file is unlocked (that is, when the file is closed). Therefore, simply saving the file does not trigger the approval process. You must perform the action that causes the client to unlock the file (such as, closing it) to trigger the approval process.

18.4.7 Deleting Content Through WebDAV

When you delete a file in a WebDAV client, the whole item associated with that file is deleted from Oracle Portal. This means that any other files that are associated with the item (for example, the item's representative image) are also deleted, as well as all sub-items, versions, and translations of the item. When you delete an item using a WebDAV client, the item is permanently deleted even if the page group is set to retain and display deleted items.

When you mark an item for deletion in Oracle Portal but it is not yet deleted from the database, the item is nonetheless no longer visible in WebDAV clients.

18.4.8 Checking Content Out and In through WebDAV

If the WebDAV client supports locking and unlocking (as do Dreamweaver and Microsoft Office 2000), you can lock a file, which in turn will check out the portal item associated with the file (the Oracle Portal equivalent of the WebDAV LOCK method).

Some clients (for example Microsoft Office) implicitly lock files when you open them. Other clients (for example, Dreamweaver) require explicit (manual) file locking if you want to prevent other users from making changes to files while you work on them.

Once a file is locked from a WebDAV client, no one else can make changes to it until it is checked back in by the same WebDAV client. Even the user who locked the item cannot make changes to the file using a different WebDAV client or the portal itself. The unlock token is owned by the client that locked the file, so the file must be unlocked by the same WebDAV client (on the same machine) that locked the file.

Note: Some clients, for example, Cadaver, provide the ability to explicitly or implicitly steal a lock token and unlock a file that has been locked by another user or client. We strongly advise users never to steal locks. It can lead to confusing behavior in the locked files, particularly when users steal locks created by other users.

Locking is useful for more than preventing the overwrite of an active file. For example, you can use it to reserve a particular file name by locking a non-existent file. When you do this, a file with the specified file name is created and locked. This prevents other users from creating a file with the same name. You must remember, however, to unlock this file when you are ready to let other users work on it.

After you have made the required changes to the file, you can unlock it, which in turn checks in the portal item associated to the file (the Oracle Portal equivalent of the WebDAV UNLOCK method). Other users are then able to make their own changes to the file.

See [Section 18.13, "Example: Using Dreamweaver to Edit Portal Page Content"](#) for more information.

Here are some additional tips for checking content out and in through WebDAV:

- You cannot check folders in or out, or recursively check out the content of a folder.
- You cannot move, copy, or delete a page if a WebDAV-supported item in that page, or in one of the page's sub-pages, is locked through another WebDAV client or by another user. WebDAV supported items include files, Zip files, images, and custom item types that are based on these item types.
- If you lock a file with an associated sub-item, other users can use a WebDAV client to delete the parent item (and thus the sub-item) even though they do not own the

unlock token for the sub-item. This is because WebDAV clients do not support the Oracle Portal item hierarchy.

- If you check an item out in Oracle Portal, you cannot update the item in a WebDAV client. This is because Oracle Portal uses a different locking model from WebDAV. Oracle Portal locks items based on user names, whereas WebDAV locks resources based on specific lock-keys. When you check an item out in Oracle Portal, it is locked in the WebDAV domain with a specific key. Only Oracle Portal (not the individual user) has the key to unlock the item. Even the user who checked the item out must check the item in again before he or she can operate on it using a WebDAV client.

For example, when Scott checks out *File1* in Oracle Portal, the portal keeps a record that Scott has checked out *File1*. The Oracle Portal WebDAV server locks *File1* and holds the related lock token. Scott can log on to Oracle Portal using any Web browser and check *File1* back in, but he cannot use a WebDAV client to unlock the item because the Oracle Portal WebDAV server (not Scott's WebDAV client) has the lock token.

- Items can be locked through a WebDAV client even though item check-out is not enabled for the item in the portal user interface. This is because some WebDAV clients, such as Microsoft Word, automatically lock an item once it has been opened for editing within the client. When the client is closed, it automatically unlocks the item. If such locking was prevented because the Enable Item Check-Out option was not selected, Oracle Portal would not properly support WebDAV file locking standards. Consequently, the portal ignores its own item check-out property setting when an item is locked through a WebDAV client.

18.4.9 Creating Oracle Portal Pages and Sub-Pages Through WebDAV

Using a WebDAV client, you can create and delete pages within existing page groups, provided you have the appropriate privileges. For example, to create a sub-page in Web Folders, right click inside the folder in which to create the sub-page and choose **New** then **Folder**. All the pages you create using WebDAV clients are Standard pages and contain an item region.

Here are some additional tips on creating pages and sub-pages through a WebDAV client:

- Page names can contain any character except the following:

, & # % \ / : * ? < > | "

Consequently, to paste a folder from the file system into Oracle Portal, it and all sub-folders that it contains must be named according to these parameters.

Note: For more information on object naming rules in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

- Although you can create pages through WebDAV, you cannot create, edit, or delete page groups through WebDAV. These actions must be performed in the portal.
- You cannot create tabs through WebDAV.

18.4.10 Viewing WebDAV Errors

When performing actions using WebDAV clients, you may encounter error messages that do not seem to be appropriate for the action. For example, in Web Folders when you create a new version of an item you may get an error message that implies the item will be overwritten rather than a new version created. Also in Web Folders, when you move an item you may get an error message asking you to verify that you want to delete the file. This is due to the underlying behavior of the client. It does not affect the actual action that is being performed.

Any errors that occur while you are using a WebDAV client with Oracle Portal are recorded in an error log. The error log is created the first time an Oracle Portal related WebDAV error occurs. It is placed on your personal page as an item titled My Error Log. This can be helpful with interpreting the error messages reported in WebDAV clients, such as the message "An error has occurred while trying to complete this operation" that is often displayed in Web Folders, or HTTP error numbers reported in Cadaver.

Note: The error log is truncated after 32K.

All errors are also recorded in the Oracle HTTP Server error log file, so if you do not have a personal page, or are a public user, the errors can still be examined by the portal administrator.

For more verbose error reporting in the Oracle HTTP Server error log file (`ORACLE_HOME/diagnostics/logs/OHS/ohs1/error_log`), ask your administrator to add the following parameter to the `oradav.conf` file:

```
DAVParam ORATraceLevel 1
```

Additionally, the following parameter will log more information in the Oracle HTTP Server error log file about WebDAV usage, such as the user, operation, and client:

```
DAVParam ORATraceEvents "agents"
```

For more information about WebDAV and the Oracle HTTP Server, see the *Oracle Fusion Middleware Administrator's Guide for Oracle HTTP Server*:

If you are using Oracle Drive, for every connection a log file is written to the following location:

```
C:\Documents and Settings\\Application Data\Oracle\ODrive\cache\logs
```

18.4.11 Authentication and WebDAV

With some WebDAV clients, you might experience multiple authentication requests. To avoid this, your portal administrator can enable the cookie option by adding the following line to the `oradav.conf` file:

```
DAVParam ORACookieMaxAge <seconds>
```

For more information, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

Some WebDAV clients, for example, Dreamweaver, do not support cookies, so even if the cookie option is enabled, you may still be prompted for your password multiple times. In some of the clients that do not support cookies, you may be able to save your user name and password, preventing the need to enter the information each time you

are prompted. Note, however, this may cause performance issues with large volume transactions.

18.5 Using Oracle Drive as a WebDAV Client

Oracle Drive is a powerful WebDAV client that maps the Portal schema in the MDS Repository as a drive and enables you to perform desktop authoring and publishing and portal-specific metadata attribution directly from the Windows desktop.

Key highlights include:

- Mount Oracle Portal Repositories as Microsoft Windows Drives
- Edit and view content with *any* Windows application
- Work with offline content and synchronize when online
- Extra capabilities available in the right-click menus
- Set properties, grant access, and preview content and pages
- Access the repositories with a command line (DOS) utility
- Search from Windows Explorer

You can use Oracle Drive with Oracle Portal 9.0.4.2 or later and Windows 2000 or Windows XP. No additional configuration is required on the Oracle Application Server middle tier, infrastructure, or Metadata Repository.

The instructions in this section cover installation, configuration, and portal-related menu options. Oracle Drive provides online help to assist you with its functionality. This section contains the following subsections:

- [Section 18.5.1, "Installing Oracle Drive"](#)
- [Section 18.5.2, "Configuring Oracle Drive to Work with Oracle Portal"](#)
- [Section 18.5.3, "Oracle Portal Right-Click Menu Options"](#)

18.5.1 Installing Oracle Drive

The Oracle Drive software must be installed on each Windows client. The Windows client must fulfill the following requirements:

- Windows 95SE/ 98/ ME/ NT/ 2000/XP
- Internet connection
- 32 MB RAM
- 10 MB free disk space



You can download Oracle Drive from the Oracle Technology Network at:

<http://www.oracle.com/technology/software/products/cs/index.html>

Installation is easy. Simply select a directory, and follow the installation instructions provided through the Oracle Installer. Restart the Windows machine once the installation is complete. After restart, the Oracle Drive icon displays in the system tray ([Figure 18-4](#)).

Figure 18-4 The Oracle Drive Icon



18.5.2 Configuring Oracle Drive to Work with Oracle Portal

Each installation of Oracle Drive must be configured to connect to the Portal schema in the MDS Repository.

To configure Oracle Drive to work with Oracle Portal:

1. Double-click the Oracle Drive icon in the system tray.
This opens the Oracle Drive dialog box.
2. If necessary, click the **Connect** tab to bring it forward.
3. From the Service drop-down menu, select **New Service**.
4. In the Service Properties dialog, specify the following properties:
 - **Service name:** Provide a name for your WebDAV connection.
 - **Username:** Enter the user name of the Oracle Portal Single Sign-On (SSO) user
 - **Server:** <MIDTIER_HOST:PORT>/dav_portal/portal/
For example: `http://mycompany.com:7781/dav_portal/portal`
5. Click **OK**.
6. From the **Drive** drop-down list, select a drive letter to map to the new Oracle Drive connection.
7. Click **Connect**.
8. Enter your Oracle Portal SSO username and password to authenticate and establish the connection.

The Oracle Drive WebDAV connection is assigned to the drive letter selected in step 6 and is available in Windows Explorer. When you right-click any file or folder under the mapped Oracle Drive, file/folder options specific to Oracle Portal display on the resulting menu.

If you encounter any problems using Oracle Drive, check the log files, which are written to the following location:

```
C:\Documents and Settings\\Application Data\Oracle\ODrive\cache\logs
```

18.5.3 Oracle Portal Right-Click Menu Options

Oracle Portal menu options are available when you right-click any file or folder under the mapped Oracle Drive. You are prompted to enter your SSO user name and password the first time you open an Oracle Portal file or folder through Oracle Drive. You will not need to re-authenticate for any other files or folders during this session.

Oracle Drive's right-click menu offers menu options for items and pages. The item menu options display under File Menu Options. The page menu options display under Folder Menu Options.

File Menu Options include:

- **Set Properties**—Displays the Edit Item screen for the current *Active* version of the item. If approvals are enabled, and a user is accessing a *Draft*, Set Properties displays the user's own draft version of the item if a draft exists and the current user created it. If the current user is the approver of the item, Set Properties displays the Edit Item screen for the *Pending* version of the item if one exists.
- **Change Access Control**—When item-level security is enabled, Change Access Control displays the Item Access screen for the current *Active* version of the item.

- **Preview Content**—Previews item content of the current *Active* version of the item. If approvals are enabled, and a user is accessing a *Draft*, Preview Content previews the user's own draft version of the item if a draft exists and the current user created it. If the current user is the approver of the item, Preview Content previews the *Pending* version of the item if one exists.
- **View Versions**—When versioning is enabled, View Versions displays the version history of the item.
- **Approve/Reject**—This menu option is usable only when the current item is *Pending* and the current user is an approver; otherwise, when a user selects Approve/Reject, an error message displays.
- **Submit for Approval**—This menu option is usable only when the current item is a *Draft* item and the current user is the creator of the draft; otherwise, when a user selects Submit for Approval, an error message displays.

Folder Menu Options include:

- **Set Properties**—Displays the Page Properties screen.
- **Change Access Control**—Displays the Page Access tab in the Page Properties screen.
- **View Page**—Displays the page.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

18.6 Using Web Folders as a WebDAV Client

Web Folders is a Microsoft operating system extension that supports the WebDAV protocol. If you access Web Folders on your computer, you can browse the content of page groups in your portal through Windows Explorer and drag and drop files into the pages in those page groups.

Note: Customers experiencing problems with Web Folders have noticed a marked improvement when they update `MSDAIPP.DLL` to version 12.0.4518.1014 or later. Typically this dll is located on your file system in `C:\Program Files\Common Files\System\Ole DB`. At the time of publication, updates were available through Microsoft at:

<http://support.microsoft.com/kb/907306>

This section provides information on how to set up Web Folders to work with your portal. It contains the following subsections:

- [Section 18.6.1, "Web Folders and Network Places"](#)
- [Section 18.6.2, "Using Web Folders to Work with Portal Content"](#)
- [Section 18.6.3, "Error Messages in Web Folders"](#)

18.6.1 Web Folders and Network Places

The process for accessing a Web Folder or a Network Place (Windows 2000 and XP's version of Web Folders) varies a little according to your version of Windows. But many of the steps are the same. This section provides information on how to set up a

Web Folder or Network Place as well as additional usage notes. It contains the following subsections:

- [Section 18.6.1.1, "Setting up a Web Folder or a Network Place"](#)
- [Section 18.6.1.2, "Additional Notes on Web Folders and Network Places"](#)

18.6.1.1 Setting up a Web Folder or a Network Place

To set up a Web Folder or a Network Place:

1. Open Windows Explorer:
 - In Windows 9x/NT, double-click **My Computer**.
 - In Windows 2000/XP, double-click **My Network Places**.
2. In Windows 9x/NT, open the Web Folders folder and double-click **Add Web Folder**.

In Windows 2000/XP, double-click **Add Network Place**.

3. Follow the wizard:
 - When prompted, enter the Oracle Portal DAV URL:

```
http://<hostname>:<port>/dav_portal/<dadname>
```

To display one particular page group or page, add those elements to the URL, using the page's internal name (rather than its display name). Follow the syntax:

```
http://<hostname>:<port>/dav_portal/<dadname>[/<page_group>][/<page>]
```

- When you are connected, enter your Portal user ID and password. To avoid having to log in multiple times during this session, check the check box to remember/save the password.

Once your Web Folder or Network Place is set up, you'll find it listed under the Web Folders or My Network Places node in Windows Explorer.

You can log in to Web Folders as *one* user at any given time. Multiple simultaneous logins are not allowed. If you want to log in to Web Folders as a new user, clear your cookies, restart your computer to clear out the current login session, then log in as the new user.

18.6.1.2 Additional Notes on Web Folders and Network Places

In Windows 2000 and XP, Web Folders is built into the operating system as part of *My Network Places*. In these operating systems, you can set up Web Folders (that is, a Network Place) through the Add Network Place wizard. To start the wizard, double-click **Add Network Place** in Windows Explorer.

To use Web Folders in Windows 9x/NT, you must install Internet Explorer 5.5 (not 6.0).

If you have Internet Explorer 5.5 installed, but cannot find a Web Folders node under My Computer, you must explicitly install the Web Folders component of Internet Explorer through Add/Remove Programs in the Control Panel.

In Windows 9x/NT, if you have Internet Explorer 6.0 installed, you will not have Web Folders. You must install Internet Explorer 5.5 and the Web Folders component. After you have done this, you can upgrade to Internet Explorer 6.0 without losing support for Web Folders.

Web Folders sometimes stores your user name and password, or your portal session cookie, or both. It uses these details when creating Web Folders or re-creating a previously-existing Web Folder. Consequently, it may not be possible to create multiple Web Folders for portals on the same host using different authentication information. We advise that, unless you understand exactly how your Web Folders implementation behaves, you do not create more than one Web Folder referencing any single host. Also, you should remain vigilant if you attempt to create a Web Folder referencing the same portal, but with different user login details; Windows may perform the login step without prompting you.

If you are using Web Folders on Windows 2000 or XP you may be prompted for your user name and password twice: once when you click **Next** after specifying the DAV URL for the portal, and again when you click **Finish**.

18.6.2 Using Web Folders to Work with Portal Content

In Web Folders, depending on your operating system, you cannot copy a file into the same folder. For example, in Windows 2000 and XP, dragging an item from the right pane into the same folder in the left pane will raise an error.

If you drag a file from one page to another within Web Folders, and the file already exists in the target page, even if versioning is enabled in the target page, the file will overwrite the existing version, and all other versions will be lost. To preserve versioning in WebDAV, copy (rather than drag) the file to your local system, then copy it from there to the target folder.

18.6.3 Error Messages in Web Folders

When performing actions on portal content using Web Folders you may encounter error messages that do not seem to be appropriate for the action. For example, when creating a new version of an item, you may get an error message that implies the item will be overwritten rather than a new version created. Also you may get an error message when moving an item asking you to verify that you want to delete the file. This messaging is caused by the underlying behavior of the client. It does not affect the actual action that is being performed.

In Windows 2000 and XP, the message you receive when you add a new version of an item may imply that you are overwriting the file rather than adding a new version. This is a limitation of the client's messaging. If Simple or Audit versioning is enabled for the page, replacing a file in the WebDAV client always creates a new version.

Sometimes, Web Folders does not update its view correctly. If this is the case, click your browser's refresh button, or press the F5 button on your keyboard. If this does not work, try closing then reopening Web Folders.

18.7 Using Cadaver as a WebDAV Client

Cadaver is an open-source, command-line, WebDAV client for UNIX. Connect to a WebDAV server with Cadaver by specifying a URL argument after the main Cadaver program name. For Oracle Portal folders, specify the same URL you entered for your portal's Web Folders in the Add Network Place Wizard:

```
bash$ cadaver portal_network_place_URL
```

When you want to do something only a privileged user can do, such as add, move, or rename content, Cadaver will prompt you for a user name and password.

After you start Cadaver, you can display a list of available commands by typing `help` on the command line. Some commands relevant to content management, include:

- Upload a file [`put filename`]
- Download a file [`get filename`]
- Upload multiple files at once [`mput common*`]

Where `common` is the part of the filename that all files being uploaded have in common. For example, to upload all files with names that start with `hr`, such as `hr_benefits`, `hr_policies`, `hr_forms`, the command would be:

```
mput hr*
```

- Download multiple files at once [`mget common*`], see *Bulk upload*
- Create a folder [`mkcol new_folder_name`]
- Delete a folder [`rmdir folder_name`]
- Rename a file [`move filename new_filename`]
- Move a file [`move filename folder_name`]
- Copy a file [`copy filename new_filename`]
- Delete a file [`delete filename`]
- Lock a file [`lock filename`]
- Unlock a file [`unlock filename`]
- Invoke help [`help`]

Use Cadaver's file-locking capabilities to secure a file while you work on it. Even if you cannot check an item out in the portal itself (for example, you have only the page privilege *Manage Items With Approval* on a page), you can still use Cadaver to lock the associated file while you work on it.

Locking is useful for more than preventing the overwrite of an active file. For example, you can use it to reserve a particular file name by locking a non-existent file. When you do this, a file with the specified file name is created and locked. This prevents other users from creating a file with the same name. You must remember, however, to unlock this file when you are ready to let other users work on it.

When you use explicit file locking, you must remember to unlock the file when you are done with it. If a file should be locked and forgotten by another user, you can use the `discover filename` command to obtain lock information.

Note: The action of discovering/stealing locks is not supported in Oracle Portal. Lock stealing particularly can lead to errors when users try to open previously locked files. Discover/steal locks at your own risk.



You'll find additional information on WebDAV, Cadaver, and Oracle Portal in the article "Using WebDAV Clients to Replicate External Content into Oracle Portal," available on the Oracle Technology Network:

http://www.oracle.com/technology/products/ias/portal/content_management_10g1014.html

18.8 Using Sitecopy as a WebDAV Client

Before using Sitecopy with Oracle Portal, you must create a run control file to define WebDAV access to the Portal schema in the MDS Repository and to the directory on the file system you plan to synchronize from or to.

For example, imagine that a file named `.sitecopyrc` is created, which contains the following:

```
site username
server username-pc.at.mycompany.com
port 7778
protocol webdav
username portal
password pword
local /home/path1/path2
remote /dav_portal/portal/path3
```

In this example:

- `Site` is the unique name that distinguishes multiple Oracle Portal site entries in this file
- `Server` is the mid-tier machine
- `Port` is the mid-tier port
- `Protocol` is the WebDAV protocol (`webdav`), which is used to connect to the Portal schema in the MDS Repository
- `Username` is the Single Sign-On Oracle Portal user that will perform the WebDAV file upload
- `Password` is the password for the Oracle Portal SSO user
- `Local` is the directory on the local file system used as the root for replication
- `Remote` is the path to the Oracle Portal page to which files are replicated, that is:


```
/dav_portal/portal/<page group>/<page>[/<page>]
```

After creating the file, set the file permissions to allow other users to read it:

```
chmod 0600 .sitecopyrc
```

The first time you start Sitecopy, you will get an error message similar to this:

```
sitecopy: Error: Could not open storage directory: /home/oracle/.sitecopy/
sitecopy: You need to create this directory and set the permissions to 0700.
```

Create the specified directory, and grant privileges to it:

```
cd /home/oracle
mkdir .sitecopy
chmod 0700 .sitecopy
```

Once you have installed Sitecopy, you can display a list of all available options/commands by entering the following command:

```
sitecopy --help
```

To initialize a connection to one or all sites defined in the run control file, use the command:

```
sitecopy --rcfile=/home/oracle/webdav/.sitecopyrc --allsites --initialize
```

To list the directory (Oracle Portal page) on the remote side, execute the command:

```
sitecopy --rcfile=/home/oracle/webdav/.sitecopyrc --allsites --fetch
```

To see the differences between the target and source repositories, use the `--flatlist` option. This read-only command enables you to see what would happen if you synchronized the source with the target directory, without making any actual changes. The `--flatlist` option lists the files and folders that would be added to or deleted from the target repository should synchronization actually occur. For example:

```
sitecopy --rcfile=/home/oracle/webdav/.sitecopyrc --allsites --flatlist
```

To synchronize the source repository (the file system) with the target repository (the Portal schema in the MDS Repository), use the following command:

```
sitecopy --rcfile=/home/oracle/webdav/.sitecopyrc --allsites --update
```

The source repository is always the single source of truth. In other words, upon synchronization, the source repository's directory/file structure is replicated to the target repository. This means that the target repository will look exactly the same as the source repository after the synchronization. The important thing to know is that elements in the target repository are physically deleted without notification.

You'll find additional information on WebDAV, Sitecopy, and Oracle Portal in the article "Using WebDAV Clients to Replicate External Content into Oracle Portal," available on the Oracle Technology Network.

http://www.oracle.com/technology/products/ias/portal/content_management_10g1014.html



18.9 Using Dreamweaver as a WebDAV Client

Dreamweaver supports the WebDAV LOCK and UNLOCK methods, so you can use it to check items in and out of Oracle Portal while you are working on them.

Unlike Microsoft Office, you must explicitly lock portal files in Dreamweaver when you want to prevent other users from making changes while you work on the files.

If you want to make use of the check-in and -out functionality, you must specify an e-mail address when setting up the Dreamweaver site for your portal.

You can also use Dreamweaver's Synchronize feature to keep the files you store on your local file system synchronized with the content in the portal.

18.10 Using Microsoft Office as a WebDAV Client

If you are using Microsoft Office 2000, a WebDAV-enabled desktop application, you can start the application, open a file in the portal, edit the content, and save it back to the portal. You do not need to download the document from the portal and then upload it again after you have edited it.

Before using an Office application to work with portal content, you must first set up Web Folders to access the portal through Windows Explorer. See [Section 18.2, "Setting Up Oracle Portal for WebDAV"](#) and [Section 18.6, "Using Web Folders as a WebDAV Client"](#).

If you are using an Office application to browse portal content, you should be aware that when you open a file, that file is locked in the WebDAV client and checked out in the portal. Therefore, other users will not be able to edit the file until the you have

closed it. When you close the file, it is unlocked and checked back in. If versioning is enabled, a new version is created. If the Office application cannot lock the file (for example, if it is locked by another WebDAV client, or the item was checked out in the portal) then it is opened as read-only.

You can also use Microsoft Office 2000 to create new items in the portal. Simply create the file and then save it directly to one of your portal's Web Folders. The item type in the portal is determined by the default WebDAV item type specified in the portal for regular files. Once you save the new file, it is added to the default item region on the portal page.

In Microsoft Word, when a file is opened it is automatically locked. The approval process is not triggered until the file is unlocked, when the file is closed. Therefore, simply saving the file does not trigger the approval process. Users must perform the action that causes the client to unlock the file (that is, close the file) to trigger the approval process.

18.11 Example: Using Web Folders to Add Content to a Portal Page

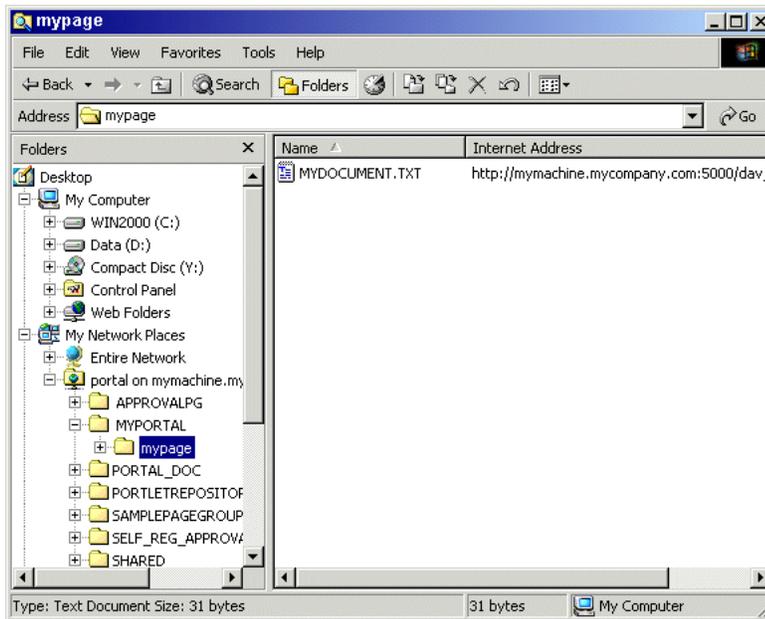
Web Folders is a Microsoft operating system extension that supports the WebDAV protocol. If you access Web Folders on your computer, you can browse the content of Oracle Portal page groups through Windows Explorer and drag and drop files into the pages in those page groups.

In this example, a user called *Scott* uses Web Folders to browse the content of a page group called *My Portal* and to add a file to a page in that page group.

Note: This example shows you how to use Web Folders in Windows 2000 where Web Folders is built into the operating system as part of My Network Places. You should be able to access the Add Network Place Wizard by double-clicking My Network Places then double-clicking Add Network Place. To use Web Folders in Windows 9x/NT, you must install Internet Explorer 5.5 (rather 6.0) and the Web Folders component. You can then upgrade to 6.0, and Web Folders will remain.

If you have Internet Explorer 5.5 installed, but cannot find a Web Folders node under My Computer, you must explicitly install the Web Folders component of Internet Explorer through Add/Remove Programs in the Control Panel.

Figure 18–5 An Example of Web Folders in Windows 2000



To use Web Folders to add content to a page (Windows 2000):

1. Open Windows Explorer and click **My Network Places**.
2. Double-click **Add Network Place** to display the Add Network Place Wizard.
3. Enter the WebDAV URL for your portal.

For user Scott, the URL is:

```
http://mymachine.mycompany.com:5000/dav_portal/portal
```

If you are not sure of the WebDAV URL for your portal, contact your portal administrator.

4. Click **Next**, then enter your portal user name and password.

Note: You can log in to Web Folders as *one* user at any given time. That is, multiple simultaneous logins are not allowed. If you want to log in to Web Folders as a new user, clear your cookies, restart your computer to clear out the current login session, then log in as the new user.

Windows Web Folders sometimes stores your user name and password, or your portal session cookie, or both and uses these details when creating subsequent Web Folders or re-creating a Web Folder that has previously existed. Consequently it may not be possible to create multiple Web Folders for portals on the same host using different authentication information. Unless you understand exactly how your Web Folder implementation behaves, on a given machine, do not create more than one Web Folder referencing any single host. Also, if you attempt to create a Web Folder that references the same portal as an existing (or previous) Web Folder but with different user log in details, be vigilant—Windows may perform the log in step without prompting you.

5. Click **Finish**.

If you are using Windows 2000, you may be prompted for your user name and password again.

6. The portal is now listed as one of your network places.

7. Double-click the portal entry in My Network Places to drill down into it.

You can now see a folder for each of the page groups on which you have access privileges. The top-level folders represent the root pages of the page groups.

8. Double-click the page group to drill down and see a folder for the next level of sub-pages in the page group.

In this example, Scott would click **MYPORTAL** to drill down into the My Portal page group. See [Figure 18-5](#).

9. Click a page name to drill down further and view the items in a page.

For example, in the `mypage` folder you can see a file associated with the file item `MYDOCUMENT.TXT`. See [Figure 18-5](#).

If the page had sub-pages, these would be listed as sub-folders.

10. Because you can access your portal's Web Folder just like any other folder in Windows Explorer, you can drag and drop files from any other folder into your portal.

You can use the drag and drop feature to move or copy files within the same page group. Copying files across page groups is not supported; though you can overcome this limitation by copying a file to your desktop, then copying it into a different page group. For more information, see [Section 18.4.3, "Moving, Copying, and Editing Content Through WebDAV"](#).

For example, Scott can drag a document from his local drive into `mypage`.

11. When you next access the page in the portal, it includes the new file. You may need to refresh the page to see your changes.

The display name of the new item is the same as the file name (with the extension removed). You can edit the item later to change this.

Note: The item is added to the default item region as one of the default WebDAV item types (depending on whether the file is a Zip file, an image file, or a regular file).

12. If you have a WebDAV enabled desktop application, such as Microsoft Office 2000, you can open files directly from your Web Folders, edit the files, and save them.

Providing they do not need approval, any changes that you make are immediately available in the portal. See [Section 18.12, "Example: Using Microsoft Office 2000 to Edit Portal Page Content"](#).

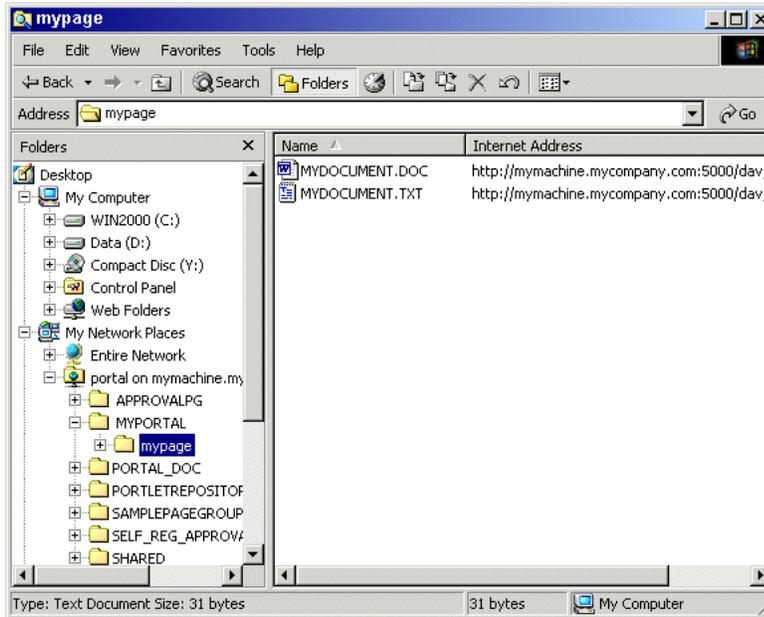
13. Create new pages in the page group by creating new folders in Web Folders.

For example, Scott can right-click inside the `mypage` folder and choose **New** then **Folder** from the menu.

18.12 Example: Using Microsoft Office 2000 to Edit Portal Page Content

If you are using Microsoft Office 2000, a WebDAV-enabled desktop application, you can start the application, open a portal file that is exposed in a Web Folder, edit the content, and save it back to the portal. There is no need to download the document from the portal and then upload it again after you have edited it.

Figure 18–6 Microsoft Office 2000 Example



To use Microsoft Office 2000 to edit the content of a page:

1. Set up Web Folders to access the portal through Windows Explorer, and then drill down to the page containing the file item to be edited.

See [Section 18.11, "Example: Using Web Folders to Add Content to a Portal Page"](#).

For example, Scott drills down to page `mypage` containing a Word document (`MYDOCUMENT.DOC`). See [Figure 18–6](#).

2. Double-click the file.
3. If prompted, enter your portal user name and password.

The selected file is opened by the relevant Microsoft Office 2000 application. For example, when Scott double-clicks `MYDOCUMENT.DOC`, it opens in Microsoft Word.

When opening a file, Microsoft Office 2000 locks the file and the related item is checked out in the portal. If the Office application cannot lock the file (that is, it is locked by another WebDAV client, or the item was checked-out in the portal) then it is opened as read-only. If the Office application locked the document when it was opened, it unlocks it when the document is closed.

4. Edit the document, and choose **File** then **Save**.
5. Exit Microsoft Word.

When you next access the file item in the portal, note that it includes the changes you made.

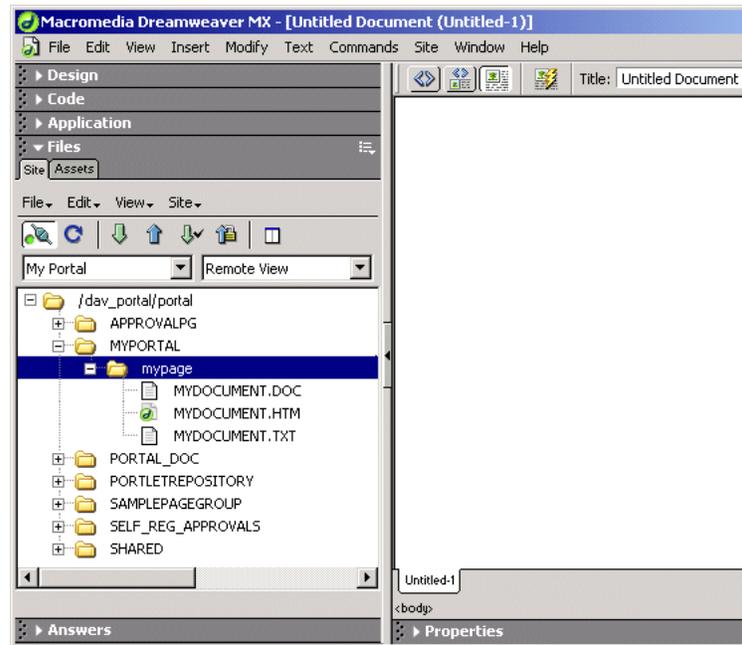
Note: You can also use Office 2000 to create new items in the portal. Simply create the file and then save it directly to the Web Folder for your portal. The item is created as the default WebDAV item type for regular files, and is added to the default item region. For more information, see [Section 18.2.1, "Specifying Default Item Types for Zip and WebDAV Uploads"](#).

18.13 Example: Using Dreamweaver to Edit Portal Page Content

Dreamweaver supports the WebDAV LOCK and UNLOCK methods. This means you can use Dreamweaver to check items in and out of Oracle Portal while you are working on them.

In this example, a user called Scott uses Dreamweaver to view and edit a document in a page in the My Portal page group. The example uses Dreamweaver MX.

Figure 18–7 Dreamweaver MX Example



To use Dreamweaver MX to edit the content of a page:

1. Open Dreamweaver.
2. Choose **Site** then **New Site** from the menu to set up a new site for the portal.
3. Click the **Advanced** tab and, from the **Category** list, choose **Local Info**.
4. Enter the **Site Name**, for example, My Portal.
5. Enter the **Local Root Folder** in which to store portal files while working on them, for example, D:\My Work\My Portal.
6. From the **Category** list, choose **Remote Info**.
7. For **Access**, choose **WebDAV**.
8. Click **Settings**.

9. Enter the WebDAV URL for the portal and your portal user name and password.
If you want to make use of the check-in and -out functionality, you must also provide your e-mail address.
10. Click **OK** to return to the Site Definition dialog box.
11. Clear the **Check Out Files when Opening** check box to be able to view files without checking them out first.
12. Click **OK** to create the new site.
13. In the Site window, click the **Connect** icon to connect to the portal.
You can now see a folder for each of the page groups in the portal. The top-level folders represent the root pages of the page groups.
14. Double-click a page group name to drill down and see a folder for each of the pages.
15. Double-click a page to drill down further and view items.
For example, within the `mypage` folder Scott can see the files associated with items in the page, such as an HTML document (`MYDOCUMENT.HTM`). See [Figure 18-7](#).
16. Right-click a file, then choose **Check Out**.
A copy of the file is placed in the local folder you identified earlier.
17. In the portal, display the page and note that there is no **Edit** icon next to the item associated with the file.
The file cannot be edited because it is locked by a WebDAV client.
18. Click the **Actions** icon and note that actions on the item are not available because it is checked out.
19. In Dreamweaver, double-click the file to open it for editing.
20. Edit the file, then save and close it.
21. Right-click the file and then choose **Check In**.
22. In the portal, refresh the page.
Other users can now view and edit the updated version of this item.

Note: You can use Dreamweaver's Synchronize feature to keep the files you store on your local file system synchronized with the content in the portal.

18.14 Troubleshooting WebDAV Issues

I worked on an item through my WebDAV client, then checked it in through the portal user interface. Now I'm getting some odd behavior and seemingly unrelated error messages.

When it comes to checking files in and out of your portal, it is best to use the same agent to do both. For example, when you open a file through a WebDAV client, you are, in effect, checking it out. Another name for this is *file locking*. The file locks are controlled through the WebDAV client. When you check the file in through the portal user interface, it creates an unclear chain of control, which can result in odd behavior and the error messages you mention.

To avoid such conflicts and confusions, when you lock a portal item through a WebDAV client, be sure to unlock it, by closing the file, before interacting with the file through your portal. The same is true in the other direction. When you check an item out through the portal user interface, check it in through your portal before you access it through a WebDAV client.

Why can't I add a duplicate item to a page re-creating WebDAV. I can do this without errors through my portal user interface.

Circumstances influence whether you can add an item of the same name to a page through WebDAV. For example, you cannot use a WebDAV client to add an item that has the same name as a pending item. This is because it is seen as trying to edit the pending item. You can use the portal user interface to add an item that has the same name as a pending item. This is because it is seen as adding a different item. The new item is created with a unique Name.

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

I do not see the item type I want to select in the Default WebDAV Item Types list.

The item types that display on the default WebDAV item types lists include only those file-based item types that are available in the page group. The page group administrator determines which item types are available in a page group. Of the available item types, only file-based item types (that is, standard and custom variations of File, Image, Image Map, and Zip File) display on these lists.

Why can't I add content to a region?

You may not have sufficient privileges to add content. You must have at least the page privilege *Manage Content* or *Manage Items with Approval* on the page that contains the region.

All pages, including those with no item regions, are visible on the WebDAV side. Moving or copying an item into a page with no item or no undefined regions produces an error.

You cannot add files to tabs in pages. If a page consists entirely of tabs, you cannot add items to the page even though it is listed in the WebDAV client.

If the page is based on a Portal Template, and the template region is locked, no one can add content to the region, unless they do so through a WebDAV client. If the default item region in a template is set not to allow users to add content, this setting is ignored by WebDAV when adding content to pages that are based on the template.

To unlock a region:

1. Open the page or Portal Template in Edit mode, and edit the region.
2. Select **Enable Users To Included Content In This Region**.
3. Click **OK** to save your changes and return to the page or Portal Template.

I cannot get Web Folders to work properly as my WebDAV client.

Customers experiencing problems with Web Folders have noticed a marked improvement when they update MSDAIPP.DLL to version 12.0.4518.1014 or later. Typically this dll is located on your file system in C:\Program Files\Common Files\System\OLE DB. At the time of publication, updates were available through Microsoft at:

Customers experiencing problems with Web Folders have noticed a marked improvement when they update MSDAIPP.DLL to version 12.0.4518.1014 or later. Typically this dll is located on your file system in C:\Program Files\Common Files\System\OLE DB. At the time of publication, updates were available through Microsoft at:

<http://support.microsoft.com/kb/907306>

I cannot duplicate an item in a WebDAV folder.

In Web Folders, depending on your operating system, you cannot copy a file into the same folder. For example, in Windows 2000, dragging an item from the right pane into the same folder in the left pane will raise an error.

How do I add a translated version of an item through WebDAV?

Currently, there is no way to do this. WebDAV clients display only the current version of an item, and only the version in the page group's default language (that is, the language in which the page group was created). Translations of items are not visible in WebDAV clients.

I copied an item in my WebDAV client, and two additional items displayed in the portal user interface along with my original item.

The original item probably had a couple of associated sub-items. When this is the case, a copy executed through a WebDAV client copies related sub-items as well as the parent item, and places the sub-items at the same level as the parent item. The content is copied, but the item/sub-item relationship is not retained.

I get errors when I try to do a multiple select and move of items in my WebDAV client.

It may be that some of the items have associated sub-items. When you select multiple items for moving, and these include items and sub-items, you may encounter error messages, and all the files may not be moved. This is because, in a multiple move, the WebDAV client attempts to move each item in turn, regardless of whether the item is a parent item or a sub-item.

If the parent item is moved first, all of its sub-items are moved with it. Then the client attempts to go back and move the parent's associated sub-items (one at a time). Because they no longer exist in the source folder, an error message is displayed. Similarly, if the sub-item is moved first, when the client attempts to move the parent item, it displays an error message because it cannot find the parent's associated sub-item.

Item versioning is enabled, but when I add a new version of an item, I get the message that the file will be overwritten.

In some clients, for example, Windows 2000, the message you receive when you add a new version of an item may imply that you are overwriting the file rather than adding a new version. This is a limitation of the client's messaging. When Simple or Audit versioning is enabled for a page, saving a file to your portal through the WebDAV client always creates a new version.

I tried to move an item using my WebDAV client, and got a message asking me to verify that I wanted to delete the file.

In Web Folders, when you move an item you may get an error message asking you to verify that you want to delete the file. This is due to the underlying behavior of the

client. It does not affect the actual action that is being performed. In other words, despite the message, the file is moved and not deleted.

I do not see some of my pages in my WebDAV client.

Are the page types other than the Standard page type? Only Standard pages are exposed in WebDAV. No other page types are listed, nor are custom pages that are based on the Standard page, type.

I tried to copy/move a page from one page group to another and got an error.

Copying pages across page groups is not supported in Oracle Portal. To perform this action using WebDAV, copy the pages to your local file system (where they display as folders), then copy them from the file system to the target page group.

The Oracle Portal-specific menus are not working on Oracle Drive.

Ask your administrator to verify that the Base Search URL (on the Global Settings, Search tab) is correct. Should this setting be updated, you must then disconnect and reconnect to Oracle Drive to get this fix to take effect.

Once you reconnect to Oracle Drive, the change is populated to the `orctxmenu.xml` file. This file is located on your file system under `C:\Documents and Settings\\Application Data\Oracle\ODrive\cache\WebDAV<portal url>`.

Translating Portal Content

Oracle Portal provides the means of storing, managing, and publishing translations of your portal content. Many of the objects that are managed in your portal can be associated with one or more languages in addition to the default language defined for a page group. The translation of an object displays automatically when the session language matches the language of the translation.

When a translation exists for a portal object in the Oracle Metadata Repository, it means that a specific instance of that object exists in a language other than the default language in addition to the instance that exists in the default language. A translated object includes its content and its translatable attribute values.

Note: Translations do not apply to portlets. However, if you change the session language to a language other than the default and edit the content of the HTML portlet, a translated version of the content is created regardless of whether or not a translation exists in that language for the page group. It is recommended that you exercise caution when editing portlet content in a language other than the default language.

This chapter explains how translations work in Oracle Portal and how to put translation features to work. It includes the following subsections:

- [Section 19.1, "Understanding Translation in Oracle Portal"](#)
- [Section 19.2, "Creating a Translatable Page Group"](#)
- [Section 19.3, "Creating Translatable Content"](#)
- [Section 19.4, "Troubleshooting Translations"](#)

19.1 Understanding Translation in Oracle Portal

To use the translation feature successfully, it is important to understand how translations are created, managed, published, and queried. This section explains how translations work in Oracle Portal. It includes the following subsections:

- [Section 19.1.1, "Selecting a Session Language"](#)
- [Section 19.1.2, "Displaying a Translation"](#)
- [Section 19.1.3, "Translation and Attributes"](#)

19.1.1 Selecting a Session Language

The *session language* is the language in use in your current portal session. Where you select a session language depends on how your portal is set up. In some installations, you can specify a session language when you log in to your portal. You can add a language parameter to the URL, for example:

```
http://<host>:<port>/portal/page/<dad>/lang-<language>/<page_guid>
```

A URL to a French translation would look like the following:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-fr/A47D41ECA23648A9E030007F0100118A
```

In all installations, you can use the Set Language portlet to select a session language and to switch between languages during the current session.

You can add the Set Language portlet to any page on which you have manage or personalization privileges. Note that the Set Language portlet displays all languages that are available in the portal, not just the languages that are enabled in the current page group.

For information about adding a portlet to a page, see [Section 15.1, "Adding a Portlet to a Page"](#). For information about the Set Language portlet, see [Section A.5.5, "Working with the Set Language Portlet"](#).

19.1.2 Displaying a Translation

The translation of an object displays automatically when the session language matches the language of the translation.

The rules for displaying translations include:

- If the default language is selected for the user session, then no translations are displayed.
- If a language other than the default language is selected, and a translation of an object exists for that language, then the translation is displayed.
- If a language other than the default language is selected, and no translation exists for an object, the default language instance of the object is displayed.

These rules are illustrated in [Table 19–1](#).

Table 19–1 Illustration of When Translations Are Displayed

Default Language	Selected Language	Available Translations	Displayed Language
English	English	English, French, German	English
English	French	English, French, German	French
English	French	English, German	English

The same rules apply to searches that use the built-in Oracle Portal search feature: Search results include only content that has been translated into the current session language. Oracle Ultra Search behaves differently: It returns content only in the portal's default language.

19.1.3 Translation and Attributes

When an item is translated, some of its attribute values can be translated and some cannot. This section lists and describes portal objects and their translatable attributes and discusses the rules surrounding attributes and translations. It includes the following subsections:

- [Section 19.1.3.1, "Translatable Attributes"](#)
- [Section 19.1.3.2, "Non-Translatable Attributes"](#)
- [Section 19.1.3.3, "Translating Attributes"](#)

19.1.3.1 Translatable Attributes

In addition to the translated content that you provide, some of the attributes associated with the object are also translatable. [Table 19–2](#) lists portal objects and their translatable attributes.

Table 19–2 Portal Objects and Their Translatable Attributes

Objects	Translatable Attributes	Comments
<ul style="list-style-type: none"> ■ Pages ■ Tabs ■ Regions ■ Templates ■ Navigation pages 	<ul style="list-style-type: none"> ■ Display Name ■ Description ■ Portlet Display Name ■ Contact E-Mail ■ Keywords ■ translatable custom attributes 	<p>Different images can also be provided for different languages</p>
<ul style="list-style-type: none"> ■ Items 	<ul style="list-style-type: none"> ■ Text ■ File ■ Image ■ Image Alignment ■ PL/SQL Code ■ Display Name ■ Description ■ Keywords ■ Author ■ translatable custom attributes 	<p>The same value that is supplied for non-translatable attributes apply to all translations of the attribute.</p> <p>Although you cannot select a different category or different perspectives for a nondefault language version of an item, you can provide translations for categories and perspectives such that, when the nondefault language is selected, the translated versions of categories and perspectives display.</p> <p>For more information on non-translatable attributes, see Section 19.1.3.2, "Non-Translatable Attributes"</p>
<ul style="list-style-type: none"> ■ Custom Page Types ■ Custom Item Types 	<ul style="list-style-type: none"> ■ Default attribute values ■ Display Name ■ Description ■ Icon ■ Procedure Link Text ■ Procedure Icon 	<p>Default attribute values are translated automatically. When users provide their own values instead of defaults, they must also provide their own translations for those values.</p>
<ul style="list-style-type: none"> ■ Categories ■ Perspectives 	<ul style="list-style-type: none"> ■ Display Name ■ Images 	<p>—</p>

Table 19–2 (Cont.) Portal Objects and Their Translatable Attributes

Objects	Translatable Attributes	Comments
■ Attributes	■ Display Name	—
■ Page Groups	■ Display Name	—
■ Styles	■ Display Name ■ Description	—



The Portal Developer Kit (PDK) provides a means for managing the storage and retrieval of strings in different languages. For more information, see the PDK page on the Oracle Technology Network:

http://www.oracle.com/technology/products/ias/portal/portlet_development_10g1014.html

19.1.3.2 Non-Translatable Attributes

Not all attributes are translatable. Across all Oracle Portal objects there are many attributes that are not translatable. This section describes the behavior of non-translatable attributes when the object has translations. To determine which attributes are translatable refer to [Section 19.1.3.1, "Translatable Attributes"](#).

When the value of a non-translatable attribute is modified, the change is copied to all language records for the current object (or version of the object).

For example, an item has the following attributes, with *us* standing for American English and *fr* standing for French (* indicates translatable attributes):

Language	Display Name*	Publish Date
us (default)	Airline Information	24-AUG-2005 01:21 PM
fr	Voyage Aériens: Informations	24-AUG-2005 01:21 PM

Display Name is translatable, and **Publish Date** is not translatable. When **Publish Date** is modified in any of the language records, the change is implicitly copied to all language records:

Language	Display Name*	Publish Date
us (default)	Airline Information	13-SEP-2005 12:00 AM
fr	Voyage Aériens: Informations	13-SEP-2005 12:00 AM

When you create a custom attribute, you can specify if it is translatable or not. In general, dynamic attributes (such as PL/SQL attributes) or attributes that use a List of Values should be made non-translatable if you do not want different values for different languages.

Some objects, like categories and perspectives, can have translatable attributes that affect the way they are viewed. But when these objects are associated with an item or a page, the associated value is not translatable. For example, for a default-language version of an item, you choose the category *Business Intelligence*. (Assume Category is one of the attributes selected for display in the item region.) You change the session language to French, and edit the item. Notice that the Category attribute does not display in the Edit Item wizard. So, for now, the French version of the item also displays the category *Business Intelligence*.

The way to address this is to provide a translation for the category itself. That is, change the session language to French, and edit the category, for example, through the Page Groups portlet. Change the category's Display Name to the French equivalent of Business Intelligence: *La Business Intelligence*.

Note: For information on how to edit a category, see [Section 5.3.1.2, "Editing a Category"](#).

When the item displays in the default English session, the item's associated category is *Business Intelligence*. When the item displays in the French session, the item's associated category is *La Business Intelligence*.

19.1.3.3 Translating Attributes

Attribute values for translated objects initially default to the values specified for the default-language version of the object. Attribute values can be translated only by editing the object while the session is set to the translation language.

For example, a page is created in the default language, English (us), with the following attributes (* indicates translatable attributes):

Name	Language	Display Name*	Keywords*
TRAVELPAGE	us (default)	Travel Page	travel, airfare, vacation

The page designer sets the session language to French and edits the page, changing the display name to *Page De Voyage*. Now, two records exist for the page in the portal schema in the Oracle Metadata Repository:

Name	Language	Display Name*	Keywords*
TRAVELPAGE	us (default)	Travel Page	travel, airfare, vacation
TRAVELPAGE	fr	Page De Voyage	travel, airfare, vacation

Note that the value of the Keywords attribute for the French translation has defaulted to the value of the English version. If the page designer switches back to English and edits the value of the Keywords attribute, the changes are not inherited by the translation. For example:

Name	Language	Display Name*	Keywords*
TRAVELPAGE	us (default)	Travel Page	travel, airfare, vacation, business expenses
TRAVELPAGE	fr	Page De Voyage	travel, airfare, vacation

If an object is created while a language other than the default language is active, then both the translation and the default language versions are created with identical attribute values. For example, if *TRAVELPAGE* is created while the session language is set to French, two records with identical values (except for Language) are created in

the portal schema in the Oracle Metadata Repository: one for the French translation and one for the English default-language version.

For example, in the following table, the default language is English (us) and the translation is in French (fr). The content contributor switches the session language to French, and adds *Page De Voyage*:

Name	Language	Display Name*	Keywords*
TRAVELPAGE	fr	Page De Voyage	voyage, tarifs, vacances
TRAVELPAGE	us (default)	Page De Voyage	voyage, tarifs, vacances

The English version (that is, the default language version) is created implicitly, copying the attribute values provided for the original, French version.

19.2 Creating a Translatable Page Group

When you want to make a page group available in different languages, you do so by creating one or more translations of the page group. Once you configure the page group for a particular language, content contributors can add content in that language.

Creating translations provides the opportunity for you to create parallel views of your portal—each in a different language. Using translations, you can provide the same experience to your users no matter what language is used to access your portal.

This section provides information about creating a translatable page group. It contains the following sub-sections:

- [Section 19.2.1, "Planning for Translations"](#)
- [Section 19.2.2, "Adding Translation Languages to a Page Group"](#)
- [Section 19.2.3, "Making a Translation Available to All Users"](#)
- [Section 19.2.4, "Deleting a Page Group Translation"](#)

For information about adding content to translation, see [Section 19.3.1, "Adding a Translated Item"](#). For information about working with versions and translations simultaneously, see [Section 19.3.3, "Copying Translatable Attributes"](#).

Note: Before you can create a translation for a particular language, the application messages for that language must be installed. For information about this, refer to the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

19.2.1 Planning for Translations

This section provides information that is useful to know when you are planning one or more translated versions of your portal. It includes the following subsections:

- [Section 19.2.1.1, "Installing Languages"](#)
- [Section 19.2.1.2, "Choosing a Default Language"](#)
- [Section 19.2.1.3, "What Must Be Translated?"](#)
- [Section 19.2.1.4, "Translation, Names, and Display Names"](#)

- [Section 19.2.1.5, "Adding Content in a Language Other than the Default Language"](#)
- [Section 19.2.1.6, "Translations and the Shared Objects Page Group"](#)

19.2.1.1 Installing Languages

You can enable translations at the page group level for any installed language. Languages are installed by the portal administrator using the `ptllang` script. For more information on `ptllang`, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

Before users can add translated content, translation to the relevant language must be enabled for the page group. For information on enabling the translation of a page group into a particular language, see [Section 19.2.2, "Adding Translation Languages to a Page Group"](#).

19.2.1.2 Choosing a Default Language

Every page group has a default language. Page group creators select a default language for a page group from the list of installed languages when they create the page group. Once a default language is selected, it cannot be changed.

Every object in a page group has a record associated with the default language. In addition, if translations are enabled in the page group, each object *may* have a record associated with each of the available languages. These records are the translations of the object.

Note: To choose a default language for a page group, you must have at least the global privilege *Create* on the object type *All Page Groups*

You choose the default language of a page group when you create the page group. To choose a default language for a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. In the Page Groups portlet, click the **Create Page Group** link.

In default installations, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. On the resulting page, enter a **Display Name** for the page group.
Use up to 256 characters. Use any character. Multi-byte characters are allowed.
5. From the **Default Language** drop-down list, choose a default language for the page group.
6. Click **Create**.

Once you click Create, the Default Language selection is fixed and cannot be changed for the page group.

19.2.1.3 What Must Be Translated?

Creating a translation makes it possible to provide parallel views of your portal: one view for the base (or default) language, another view for a second language, another view for a third language, and so on. You translate your content and add it to the appropriate translated view. Oracle Portal provides translations for error messages

and user interface elements, and provides the appropriate language formats for portal-provided numbers and dates.

In addition to your content, you will probably want to translate any displayed metadata values that were provided when the default-language version of the content was uploaded. For example, the following list shows information translators may want to translate:

- Category display names and images
- Perspective display names and images
- Page display names, descriptions, and images
- Page parameter display names and descriptions
- Item display names, descriptions, keywords, URLs, files, text, and images
- Attribute display names
- Custom item and page type display names, descriptions, and images
- Style names

To view a page group in a particular language, users select the language in the Set Language portlet. Numbers and dates display in the format appropriate to the language. Lists are sorted in the order appropriate to the language. If a user chooses a language in the Set Language portlet for which no translation exists, the page group content is displayed in the default language.

19.2.1.4 Translation, Names, and Display Names

Typically, changes to Display Names apply only to the current session language. Translations to Names affect all language versions. For example, when you change the *Name* of a category, all translations use the new name. When you change the *Display Name* of a category, only the current translation's version of the Display Name is changed.

For more information, see [Section 19.1.3.1, "Translatable Attributes"](#), earlier in this chapter.

19.2.1.5 Adding Content in a Language Other than the Default Language

When you add new information to a page group, the information is added to the translation associated with the user's current portal language setting. If the language is not the page group's default language, the information is also added to the default language view of the portal. When users view the page group in the default language, they will see the new information in the language in which it was added until a translation in the default language is provided.

For example, imagine a page group with a default language of English and a translation in French. If the user creates the initial item in the French view, a copy is created in the default English view. Everyone who accesses the English view displays the item and sees its French content. When a user edits the item in the French view, those changes apply only to that translation. The users accessing the item in the English view see the original (French) item, without the edits.

For more information, see [Section 19.3.1, "Adding a Translated Item"](#).

Note: You cannot copy an item from a page group with one default language into a page group with different default language. You cannot do this even if the other default language page group is set to the same language as the first page group through the Set Language portlet. Objects can be copied only between page groups sharing a common default language.

When both page groups have the same default language but not all the same translations, items with translated versions copy from one page group to another with only the translations that are common to the two page groups.

19.2.1.6 Translations and the Shared Objects Page Group

The default language of the Shared Objects page group is English. If you create a page group in a language other than English, then add an untranslated object from the Shared Objects page group to it, an error is displayed. As a work-around, provide translations for shared objects; or, at least, provide a translation for the relevant shared object.

This can have implications particularly when you want to share a template over non-English page groups. Objects on a template from the Shared Objects page group that do not have an explicit translation in the relevant language do not display on the non-English pages that are based on the template. If you want those objects to display, first you must add translated versions of those objects to the template. For more information, see [Section 19.3.1, "Adding a Translated Item"](#).

The same holds true for navigation pages. That is, a navigation page in the Shared Objects page group must be translated to the default language of a non-English page group in order for it to be used in that page group.

19.2.2 Adding Translation Languages to a Page Group

When a page group is created, it is available in a single default language (specified at creation time). You can subsequently create translations of the page group. Once a translation is created, content contributors can easily add content to a page group in the translation language. When users choose to view the portal in the translation—for example, by selecting the translation language in the Set Language portlet—they see the translated content.

To add a translation language to a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group for which to configure a translation.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Translations** tab to bring it forward.
6. From the **Language** list, choose the translation language.

This list includes the languages for which translations have not yet been created, but whose application messages have been installed and made available for user data translation.

7. Select the **Online** check box to make the language accessible to all users.
If you do not select **Online**, the language is accessible only to users with the page group privilege *Manage All*.
8. Click **Apply** after each selection before adding a new language.
9. Click **Create**.
10. Click **OK**.

19.2.3 Making a Translation Available to All Users

When you first create a translation, the translation is available only to users with the page group privilege *Manage All*. You can edit a translation's status setting to make it available to all users.

To change the status of a translation:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the relevant page group.
By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.
4. Click the **Configure** link.
5. Click the **Translations** tab to bring it forward.
6. Under the Edit Translation section, select **Online** to make the translation available to all users.
If you do not select **Online**, the translation is available only to users with the page group privilege *Manage All*.
7. Click **Apply** before changing the status of another language.
8. Click **OK**.

19.2.4 Deleting a Page Group Translation

Deleting a translation deletes all the content in the page group for the translation language. You cannot delete the page group's default language (that is, the language specified when the page group was created) unless you delete the entire page group (including all its translations).

To delete a translation from a page group:

1. Log in to Oracle Portal.
2. Click the **Build** tab to bring it forward.
3. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the translation to be deleted.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

4. Click the **Configure** link.
5. Click the **Translations** tab to bring it forward.
6. Click the **Delete** icon next to the translation to be deleted.
7. Click **OK**.

19.3 Creating Translatable Content

This section provides the information you need when you are ready to translate specific content objects. It contains the following subsections:

- [Section 19.3.1, "Adding a Translated Item"](#)
- [Section 19.3.2, "Translations and Item Versioning"](#)
- [Section 19.3.3, "Copying Translatable Attributes"](#)
- [Section 19.3.4, "Translations and Approvals"](#)
- [Section 19.3.5, "Translations and Object Deletion"](#)

19.3.1 Adding a Translated Item

If your portal is configured to display in more than one language, then it is likely you will be adding content to it in each language it uses. A large part of a portal translation is taken care of automatically: all the standard user interface elements, including their labels and hint text are automatically translated; all intrinsic messages are automatically translated. But the content you provide, including item content and any attribute values you enter manually, must be translated by you. Once you have translated the content, the rest is easy.

To provide a translated version of content:

1. Log in to Oracle Portal.
2. Go to the **Set Language** portlet, and select the language under which you will add an item translation.

It may be necessary to ask your page group administrator to make this portlet available to you. It is located under **Portal Content Tools** in the Portlet Repository.

3. Go to the page on which to provide an item translation.

For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).

4. Click the (translated) **Edit** link at the top of the page.

This opens the page in Edit mode.

5. Click the **Edit Item** icon next to the relevant item ([Figure 19–1](#)).

Figure 19–1 *Edit Item Icon*



6. Upload the translated content, enter translated text, or otherwise provide the content translation for the item, and enter translated values for any translatable item attributes.

At this point, providing translated content is the same as editing the specific type of item on an untranslated page. For information on how to add an item, see [Section 14.2, "Adding Items to a Page"](#).

A variation on this task occurs when item versioning is enabled and multiple language versions plus the latest default language version of an item are available. In such a case, you are given the opportunity to select an item version from which to copy attribute values. For more information, see [Section 19.3.3, "Copying Translatable Attributes"](#).

The original item displays in your portal's default language, as usual. The translated version displays when you select the translation language from the Set Language portlet.

In the translated view of the page, any content that has not been translated into the selected language is displayed in the default language. (For more information, see [Section 19.1.2, "Displaying a Translation"](#).)

Note: WebDAV clients expose only the base (default) translation content of a page group. This means that updates to translations cannot be performed and will not be displayed through WebDAV. Copies and moves initiated from WebDAV may fail as *Forbidden* if they do not operate between page groups with the same default language.

19.3.2 Translations and Item Versioning

The implicit behavior of translation creation also applies when you use item versioning. When you create a new version of an item, a new record is added to the portal schema in the Oracle Metadata Repository. All versions of an item have the same Globally Unique Identifier (GUID) but each version is assigned a new ID attribute value. A Current Version attribute indicates which version is active. For example:

GUID	ID	Version	Language	Display Name*	Current Version
44429	44430	1	us (default)	Airline Information	N
44429	44431	2	us (default)	Airline Information 2	Y

When you switch to French and edit the current version, a French record is implicitly created for Version 2. Notice that no translation exists for Version 1 and that both the English and French records for Version 2 have the same ID:

GUID	ID	Version	Language	Display Name*	Current Version
44429	44430	1	us (default)	Airline Information	N
44429	44431	2	us (default)	Airline Information 2	Y
44429	44431	2	fr	Voyage Aériens: Informations 2	Y

With the language still set to French, create a new version (3). An English (default language) record is implicitly created for Version 3, with attribute values copied from the English record for Version 2:

GUID	ID	Version	Language	Display Name*	Current Version
44429	44430	1	us (default)	Airline Information	N
44429	44431	2	us (default)	Airline Information 2	N
44429	44431	2	fr	Voyage Aériens: Informations 2	N
44429	44432	3	us (default)	Airline Information 2	Y
44429	44432	3	fr	Voyage Aériens: Informations 3	Y

Switch back to English, and create a new version (4):

GUID	ID	Version	Language	Display Name*	Current Version
44429	44430	1	us (default)	Airline Information	N
44429	44431	2	us (default)	Airline Information 2	N
44429	44431	2	fr	Voyage Aériens: Informations 2	N
44429	44432	3	us (default)	Airline Information 2	N
44429	44432	3	fr	Voyage Aériens: Informations 3	N
44429	44432	4	us (default)	Airline Information 4	Y

Notice that no translation is created for Version 4. Therefore, when version 4 is the current version, no translation is displayed. This may cause users to think that their translations have disappeared. Translations for version 4 must be manually created by editing version 4 in the nondefault language(s).

For more information, see [Section 19.3.3, "Copying Translatable Attributes"](#)

19.3.3 Copying Translatable Attributes

When you translate an item in a page group where item versioning is enabled, you have the opportunity to copy the attributes of any earlier translation or the latest default-language version and apply them to the new translation of the item. Use the Available Translations section in the Edit Item wizard to select the item version from which to copy attributes.

For translated items, you can view and edit only *translatable* item attributes. The non-translatable attributes do not display on the Item Attributes screen (see [Section 19.1.3, "Translation and Attributes"](#)). However, you can view the non-translatable attributes by clicking the Properties icon ([Figure 19–2](#)) in the banner at the top of the Edit Item screen.

Figure 19–2 The Properties Icon



To change non-translatable attributes, you must set the portal to its default language view and edit the item there. Whatever changes you make to non-translatable attributes are made automatically across all translations of the item.

The **Available Translations** section displays on the Item Attributes page under the following conditions:

- The page group has at least one available translation
- Item versioning is set to *Simple* or *Audit* for the page group or the current page
- The item's status is neither *Pending* nor *Draft*
- You are working in a language other than the default language
- The default-language version of the item is more recent than the translated version

For example, imagine that versioning is enabled, English is the default language, and you have the following versions:

- V1: English
- V2: English, French
- V3: English, French, German
- V4: English, French, German
- V5: English
- V6: English, French
- V7: English (latest default-language version)

When you add a new French version, the Available Translations option displays on the Item Attributes screen in place of the default Item Version Control section. The Available Translations section includes a drop-down list of available versions. The drop-down list includes V7: English, as the latest default-language version, as well as all the French versions of the item (V2, V3, V4, V6).

When you add a new German version, the Available Translations option displays with a selection list that includes V7: English, as the latest default-language version as well as all the German versions of the item (V3 and V4).

If the latest French or German version you are updating is V7, this dialog does not display.

By default, the latest version of an item always displays. If you update a default-language version of an item, but do not update the translated version of the item, the default-language version displays in the translated version of the portal. Your options are:

- Leave this "as is"
- Add a translated version at the same level as the most recent default-language version
- Select an earlier translated version for display from the Item Actions screen. See [Section 14.12, "Using Item Version Control"](#).

To select a version for translation:

1. Log in to Oracle Portal.
2. Go to the page that contains the item for which to provide a new translation.
For information on locating a page through the Page Groups portlet, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
3. Click the **Edit** link at the top of the page.
This opens the page in Edit mode.
4. Click the **Edit Item** icon beside the relevant item ([Figure 19-3](#)).

Figure 19-3 The Edit Item Icon

- From the **Copy From** drop-down list in the Available Translations section, select the version of the item from which to copy attribute values.

Note: If you make changes to item attributes, then select a different version from the Copy From drop-down list, any changes made to item attributes on the Edit Item screen are lost. Once you click **Go**, the Item Attributes screen repopulates with the attribute values of the newly-selected version. Select a version from Available Translations and click Go before you change any item attribute values.

- Click **Go**.
- Click **OK** to confirm your selection, copy the selected version's attributes, and return to the Item Attributes screen.

19.3.4 Translations and Approvals

Translations of items can be submitted to an approval process when they are created or edited. To properly review and approve content for a pending translation, approvers must always set their session language to the same language as the translation.

For example, a user with the page (or tab) privilege *Manage Items With Approval* creates a French translation of an item and submits it for approval. The French display name of the item appears in the approver's Notifications portlet, even when the approver's session language is set to English. Approvers can approve or reject the item independent of what their session language is set to. However, if they are to either preview the changes or edit the translation's attributes, they must first switch their session language to French.

Note: As the approver, if your session language is not the language of the submitted translation, you can approve an item without previewing the changes. If you plan to preview the item before approval, always switch the session language to the language of the submitted translation.

To properly preview and approve content for a pending translation, approvers must always set their session language to the same language as the translation.

The same rules apply when an approver edits a pending item. If an approver has the required edit privilege on a pending item, he or she can edit the item without disrupting the approval process. However, if the item is in a language other than the default language, it can be edited only in that language. In other words, assuming the page group's default language is English, when a French translation displays in the approver's queue, the approver cannot edit the translated item while the session language is set to English. The approver can edit the translated item only by first setting the session language to French (provided the approver has the privileges required to edit the item).

For information on which users can view items in what state, see [Section 17.9.3, "Item URL Security"](#).

19.3.5 Translations and Object Deletion

Deleting an object from a page group deletes all translations of the object. This includes the deletion of all attribute values associated with the object. For example, imagine that you have a page group with a default language of English and a translation in French. If you delete the French translation of a category, the English category is also deleted, as are all the attribute values associated with the category, such as its Title Image, Rollover Image, and Icon. All objects classified under the deleted category are reclassified under the *General* category.

19.4 Troubleshooting Translations

I want to approve an item, but I can see only a translated preview of it.

It could be that you are using a different session language than was used to submit the translated item.

For example, a user with the page (or tab) privilege *Manage Items With Approval* creates a French translation of an item and submits it for approval. The French display name of the item appears in the approver's Notifications portlet, even when the approver's session language is set to English. However, if the approver does not switch the session language to French, the item can be only previewed.

Change your session language to, in this case, French, then try again. To properly preview and approve content for a pending translation, you must set your session language to the same language as the translation.

English is my default language, and I have a French translation. For one of my items, only the English-language version displays (in all language versions).

Is item versioning turned on? If so, it could be that the most current default-language version of the item has no translations at the same version level. When the current default language version does not have a translation, this may cause users to think that their translations have disappeared.

Set the session language to, in this case, French, and edit the item, uploading a new French version, or selecting an earlier French version to copy as the current translated version.

When I edit an item to provide a Spanish translation, I am unable to select my Spanish version of its category and perspectives.

When you edit an item in a language other than the default language, the Category and Perspectives attributes do not display. Switch the session language to the default language to edit an item's Category and Perspective attributes.

To translate categories and perspectives, you must edit these objects directly. That is, set your session language to, in this case, Spanish. Click the untranslated category name in the Page Groups portlet. And provide a Spanish Display Name for the category. Do the same thing for your perspectives.

As you switch between session languages, all translated versions of your categories and perspectives also switch, provided you have translated their Display Names.

I have exposed my portal in both Spanish and English. I have added a file item to the Spanish version. It is also displaying in the English version.

Assuming that your portal's default language is English, any content you provide to translated versions of your portal also displays in the default language version (in this

case, the English version). Add an English translation of the file to the English version, and that will be displayed in lieu of the Spanish version you uploaded first.

Once an English translation of the document is added to the portal (in the same location), users of the English version of the portal, will see only the English version of the document.

Setting Up an Approval Chain

This section discusses how to set up a chain of approval that documents must pass through before they are posted publicly (or to a specified group). It includes the following subsections:

- [Section 20.1, "Setting Up an Approval Process for a Page"](#)
- [Section 20.2, "Enabling Users to Subscribe to a Page or Item"](#)
- [Section 20.3, "Troubleshooting Approval and Notifications"](#)

Approvals can be enabled at the page group and page level. A page-level approval process overrides that of the page group, and sets up an approval process that is unique to the page.

To set up an approval process for a page, the page group administrator must enable two options at the page group level: **Enable Approvals and Notifications** and **Allow Page to Override the Page Group Approval Process**. The **Override** option automatically adds an Approval tab to the Properties page of all standard pages created in this page group. For information on how to do this, see [Section 5.4, "Setting Up Approvals."](#)

Oracle Portal supports two different types of approval process:

- Oracle Portal approval process
- Oracle BPEL workflow process

You cannot use a different type of approval process at the page level. Pages must use the same type of approval process as the page group to which they belong. For more information about the different types of approval process, see [Section 5.4, "Setting Up Approvals."](#)

Intended Audience

The content of this chapter is intended for users with at least the *Manage* privilege on the pages you will work with. If a particular task requires, or can be performed under, different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges."](#)

You'll find additional information related to the Approval and Notification process in [Section 5.4, "Setting Up Approvals."](#)

20.1 Setting Up an Approval Process for a Page

An approval process is a series of one or more approval routing steps. Each routing step includes one or more users, or groups (approvers), or both, who must approve an item before it is published. Routing to the approvers can be in serial (one at a time) or

in parallel (all at once). Each step can be defined to require a response by any one approver or by all approvers.

You can specify that users can add draft versions of an item without immediate approval. Draft items are only visible to the item owner, who can submit the item for approval, once it is finalized. See [Section 2.7.1.1.3, "Submitting a Draft Item for Approval."](#)

You can also extend the approval process to *all* users contributing content to the page, instead of just those with the *Manage Items With Approval* privilege.

For users to receive notice of an approval, they must place a Notifications portlet or My Worklist portlet on one of their pages. For more information, see [Section 2.7.2, "Approving or Rejecting Content."](#)

20.1.1 Setting Up an Oracle Portal Approval Process for a Page

To set up an Oracle Portal approval process for a page:

1. Go to the page where you will define an approval process.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal."](#)

2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** in the page toolbar.

Be sure to click the link for the *page* rather than the *page group*.

4. Click the **Approval** tab to bring it forward.
5. Select **Define a New Approval Process for the Page**.

The **Approval Routing List** section now appears.

Note: If you select this option and then do not define an approval process for the page, users with the *Manage Items With Approval* privilege will be able to add items to the page without requiring approval.

If you do not select this option, the page uses the approval process defined for the page group.

6. In the **Approvers** field in the **Approval Routing List** section, select one or more approvers (users or groups) for the first step of the approval routing list.

Click the **Users** or **Groups** icon to add a user or a group. If you type in user and group names manually, check spellings carefully to avoid invalid entries.

Note: Each step of the approval routing list can include both users and groups. Use a semicolon (;) as the separator between multiple users and groups.

Do not use the same approver in more than one step. Any additional times the approver is listed, he or she will be skipped.

Oracle Portal provides the following special approvers:

- **#PAGE_GROUP_MANAGER#:** Any user or group with the *Manage All* privilege on the page group, or the *Manage All* global level privilege on all page groups.
- **#PAGE_MANAGER#:** Any user or group with the *Manage* privilege on the page.
- **#CONTENT_MANAGER#:** Any user or group with the *Manage Content* privilege, or the higher-level *Manage* privilege, on the page.

Oracle Portal uses the Oracle Internet Directory for identity management, serving as the repository for users and groups. In the Oracle Internet Directory, groups are uniquely identified by their distinguished name (DN). Each group has a unique DN, though many groups can share a common name, in the same way that two people can share a common name, yet have completely different lineage (for example, John Smith and John Doe). When working within the portal, groups created from within that portal are displayed simply with their common names. However, when the portal references a group from some other location in the Oracle Internet Directory—such as a group from some other portal associated with the same Identity Management Infrastructure—the DN of the group is displayed to distinguish it from the portal’s locally defined groups.

7. In the **Routing Method for Approvers** list, choose a routing method for the approval routing list:
 - **One at a time, all must approve (Serial, All)**—This sends the approval to approvers in the step one at time in the sequence specified. All of the approvers must respond to the approval.
 - **All at the same time, all must approve (Parallel, All)**—This sends the approval to approvers in the step all at the same time. All of the approvers must respond to the approval.
 - **All at the same time, only one must approve (Parallel, Any)**—This sends the approval to approvers in the step all at the same time. Only one of the approvers must respond to the approval.
8. Click **Add Step** to continue adding steps to the approval routing list.

For each step, select approvers and a routing method. Each step you add is listed in the **Current Approval Process** section. You can edit existing steps by clicking the list of users and groups, or the **Edit** icon. When you edit a step, the step details are displayed in the routing method section and the **Add Step** button changes to **Update Step**.
9. Select **Enable Item Drafts** to enable users with the *Manage Items With Approval* privilege to add draft versions of items to this page, without having to submit them for approval.

Draft items are visible only to the item owner in the Pending Items Preview and List editing views. Once the draft is finalized, the user can submit the item for approval from the **Actions** page. Once enabled, this option cannot be disabled until all draft items in this page are submitted for approval.

If you do not want to allow content contributors to upload draft items without approval, do not select this option.

Note: Regardless of whether **Retain Deleted Items** is enabled for the page group, when you delete an item with the status Draft, it is irrevocably deleted from the portal. The only way to restore the item is to add it to the page once again.

10. Select **All Users Require Approval** if *every* content contributor requires approval.

By default, this option is not selected which means that only users with the *Manage Items With Approval* privilege require approval.

11. Click **OK** when the approval routing list is complete.

An approval routing list is now defined for the page.

If there is an active approval process pending for an item, the approval routing steps for the item cannot be reordered. If the approval routing list is changed at the page group or page level, it does not affect the process pending for the item. However, the administrator can still delete routing steps and edit the recipients in individual steps of the pending process (but cannot reorder the steps).

At any point, a page group administrator or content manager can approve or reject a pending item. On approval by the portal administrator, the process skips the current approver and moves onto the next approver. On rejection, the approval process ends. This is a useful way of bypassing a user in an approval process who is unavailable.

20.1.2 Specifying an Oracle BPEL Approval Process for a Page

Note: Before you can specify an Oracle BPEL approval for a page the process must first be defined and deployed using Oracle BPEL Designer and then the portal administrator must create a process definition for that process. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

To specify an Oracle BPEL approval process for a page:

1. Go to the page where you will specify an approval process.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal."](#)
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** in the page toolbar.
Be sure to click the link for the *page* rather than the *page group*.
4. Click the **Approval** tab to bring it forward.
5. Select **Define a New Approval Process for the Page**.

6. From the **BPEL Process User** list, choose the portal user to associate with the BPEL process. This user must have Manage All privileges on the page group and will typically be the page group administrator. The user does not have to be a user that is part of the Oracle BPEL approval process.
7. From the **Process Name** list, choose the Oracle BPEL process definition that you want to use for this page. Use the description, if one exists, to help you decide if this is the one that you want to use.

The process definitions must have already been created by the portal administrator. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

8. From the **Access Users** list, select the users that you want to add as approvers for the BPEL workflow process and click the right arrow to move them to the **Workflow Approvers** list.

Any user with *Manage* or *Manage Content* privileges on the page can be selected as an approver.

The users included in the **Workflow Approvers** list are passed to the BPEL process in the order they appear here.

9. Select **Enable Item Drafts** to enable users with the *Manage Items With Approval* privilege to add draft versions of items to this page, without having to submit them for approval.

Draft items are visible only to the item owner in the Pending Items Preview and List editing views. Once the draft is finalized, the user can submit the item for approval from the **Actions** page. Once enabled, this option cannot be disabled until all draft items in this page are submitted for approval.

If you do not want to allow content contributors to upload draft items without approval, do not select this option.

Note: Regardless of whether **Retain Deleted Items** is enabled for the page group, when you delete an item with the status Draft, it is irrevocably deleted from the portal. The only way to restore the item is to add it to the page once again.

10. Select **All Users Require Approval** if *every* content contributor requires approval.
By default, this option is not selected which means that only users with the *Manage Items With Approval* privilege require approval.
11. Click **OK**.

20.2 Enabling Users to Subscribe to a Page or Item

You can enable users to subscribe to a page *or* items on a page, so that they can be notified whenever that page or item is updated. Note, however, that subscriptions are not possible unless **Enable Approvals and Notifications** is enabled for the relevant page group.

You can add the **Subscribe** link or icon to any page or region at any time. However, the Subscribe link or icon is visible only if the page group administrator has enabled approvals and notifications for the page group. See [Section 5.4.2, "Enabling Approvals and Notifications for a Page Group."](#)

Additionally, to enable users to subscribe to a page, you must have at least *Manage Content* privileges on the page. To enable users to subscribe to an item, you must have at least *Manage* privileges on the page that contains the item.

Enabling Users to Subscribe to a Page

Subscribing to a page automatically subscribes a user to every item on that page. To enable users to subscribe to a page:

1. Go to the page you will work with.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal."](#)

2. Switch to **Edit** mode.
3. Click the **Add Item** icon in an item region.

If the page does not have any item regions, you will need to add a new region to the page and make that region an item region.

Even if there is already an item region in the page, you may want to create a new region at the top of the page specifically for the **Subscribe** link. If the page includes a navigation page, you may want to consider adding the **Subscribe** link to the navigation page instead of the page itself.

4. From the **Built-In Navigation Item Types** list, select **Portal Smart Link**.
5. Click **Next**.
6. In the **Portal Smart Link** list, choose **Subscribe**.
7. If you want to use the default label for the **Subscribe** link, select **Use The Default Display Name**.

Using the default display name means that the display name will be automatically translated if users view the page in a different language.

When you select this check box, the **Display Name** field is cleared.

8. If you want to provide your own label for the **Subscribe** link, enter it in the **Display Name** field.
9. If you want to use an image instead of a label:

- a. Provide the name of the image in one of the **Image** fields:

You can add images in the JPEG, GIF, or PNG formats.

In the first field, click the **Browse** button to locate and select a file on your file system.

OR

In the second field, either enter the URL and file name of an image on the Web, or enter the internal name of an image already uploaded to Oracle Portal, for example `1655.gif`. To get the internal name of the image, right-click the image in your portal, and select **Properties** from the resulting menu.

If you are using item versioning and you always want to show the current version of an image—whether the image is the item itself or an attribute associated with the item—use the image's durable URL instead of the internal file name. The durable URL always picks up the latest version of the image. For more information, see [Section 14.12.4, "Images and Item Versioning."](#)

- b. In the **Image Alignment** field, choose how you want the image to be aligned within the region.

For descriptions and examples of image alignment options, see [Table 13-1, "Item Image Alignment Options"](#) in [Chapter 13](#).

10. Click **Finish**.

Users can now click the **Subscribe** link to be notified whenever that page is updated. Subscribing to a page automatically subscribes a user to every item on that page.

Users are notified through the My Notifications portlet of the changes to pages or items they have subscribed to. Users must have access to a page that includes the My Notifications portlet. Also, the My Notifications portlet must be set up to display subscription notifications. See [Section 2.4.3, "Setting Up the My Notifications Portlet to Show Your Subscriptions."](#)

Enabling Users to Subscribe to an Item

To enable users to subscribe to an item:

1. Go to the page you will work with.

For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal."](#)

2. Switch to **Edit** mode.
3. Click the **Edit** icon in the region you will work with.
4. Click the **Attributes** tab.
5. From the **Available Attributes** list, select **Subscribe**.
6. Click the **Move** icon to move the attribute to the **Displayed Attributes** list.
7. Click **Apply**.

It is very important that you click **Apply**. If you do not click **Apply**, any changes that you make to the list of displayed attributes will be lost when you click **Close**.

8. Click **Close**.

Users can now click the **Subscribe** icon next to any item in the region to be notified whenever that particular item is updated.

Users are notified of changes through the My Notifications portlet. Users must have access to a page that includes the My Notifications portlet. Also, the My Notifications portlet must be set up to display subscription notifications.

If you include a Subscribe link on a template, all the pages that are based on the template will include the link. When users subscribe to the pages, they will receive notifications when the pages and the template itself are updated.

Enabling Users to Subscribe to Items on a Tab

If your page contains tabs, you can add a Subscribe link at the tab level. Subscribing to a tab automatically subscribes a user to every item on that tab.

Note: Provide Subscribe links at the page level *or* the tab level, but not both. When a user subscribes to a page, the user is automatically subscribed to *all* items on the page (including items on tabs). If you provide a Subscribe link on a tab, it has no effect if the user is already subscribed to the page, and this behavior could be confusing for the user.

To enable users to subscribe to a tab:

1. Go to the page you will work with.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal."](#)
2. Switch to **Edit** mode.
3. Click the **Add Item** icon in the tab.
4. From the **Built-In Navigation Item Types** list, select **Portal Smart Link**.
5. Click **Next**.
6. In the **Portal Smart Link** list, choose **Subscribe**.
7. If you want to use the default label for the Subscribe link, select **Use The Default Display Name**.

Using the default display name means that the display name will be automatically translated if users view the page in a different language.

When you select this check box, the **Display Name** field is cleared.

8. If you want to use an image instead of a label, enter **Image** and **Image Alignment** details as described previously in [Section , "Enabling Users to Subscribe to a Page"](#) - Step 9.
9. Click **Finish**.

Users can now click the **Subscribe** link to be notified whenever items on that tab are updated.

Users are notified of changes through the My Notifications portlet. Users must have access to a page that includes the My Notifications portlet. Also, the My Notifications portlet must be set up to display subscription notifications.

20.3 Troubleshooting Approval and Notifications

I want to define an approval process for my page, but I cannot see the Approvals tab.

You can only define approvals for a page if the page group administrator has enabled pages to override the page group approval process. Contact the page group administrator to discuss whether it is appropriate for pages within the page group to override the page group approval process.

I'm defining my approval process, and Group IDs are being displayed instead of Group Names.

When a group from one instance of Oracle Portal is added to an approval routing step in another instance, the group's internal ID may appear instead of its name. This may arise when a *non-local* group is selected in the Recipient(s) field on the Approval

Routing page. Non-local groups are those that are defined and created in another portal instance. Non-local groups are included in the list when you search for *All* (instead of *Local*) when selecting a user group for an approval routing step. You cannot replace a non-local group's ID with the group name.

I want to use an Oracle BPEL workflow process for approvals in my page, but I am only being given the option of setting up an Oracle Portal approval process.

Pages must use the same type of approval process as the page group to which they belong. If the page group administrator has set up the page group to use Oracle Portal approval process, you must also use an Oracle Portal approval process for your page. Likewise, if the page group uses Oracle BPEL for approvals, your page must use this type of approval process too.

I cannot see the Oracle BPEL workflow process that I want to use on the Approvals tab.

Before you can use an Oracle BPEL workflow process, the portal administrator must first create a process definition for it. For information about how to do this, see the *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

The approval process is not being triggered when I add or modify an item.

When the Require Approval for All Users option has been set at the page group or page level, the approval process initiates when *any* user creates or modifies an item. If this option is not set, the approval process begins only when a user with the *Manage Items with Approval* privilege creates or modifies an item. If the approval process is not initiating, check to see if:

- The user who created or modified an item had a higher privilege level than *Manage Items with Approval*. In this case, the approval process will not (and should not) be initiated.
- The user with the *Manage Items with Approval* privilege is also the owner of the page, or is the page group administrator. These higher privileges override the *Manage Items with Approval* privilege.

I modified an item that was pending approval. Will my modifications be lost?

Only a user who is an approver and has *Manage Content* or higher privileges can edit a pending item. The changes are made directly to the pending item. The modifications are not lost but will appear once the item is approved.

I uploaded a draft item but cannot see it on my page. Pending, rejected, and deleted rejected items are not displayed either.

Drafts do not display as expected when the page that contains the draft item is cached at the system level. To avoid access problems, do not cache pages (or templates) at the system level when Approvals and Notifications are enabled. See [Section 21.1, "Page Caching."](#)

Improving Page Performance

As with any modern Web-based application, the browser response time for Oracle Portal pages largely depends on the number of user requests and the hardware employed to service them. Displaying a single page to a user may require many separate transactions, from verifying whether the user has permission to view the page, to loading the images that appear on the page, to calling a style sheet that contains formatting information for the page, and so on.

Changing the hardware deployed for a production portal is usually a difficult task, so administrators must rely on performance tuning the portal to maximize the performance from the available hardware. Performance tuning can take on many facets especially in Oracle Portal's multi-tier architecture. Each tier provides tuning options that can degrade performance if not configured correctly.

Oracle Portal provides several caching options so that page designers and administrators can optimize the performance of the pages they design. It is important that these caching options are analyzed, for pages, portlets, and templates, before you deploy your portal. This step will ensure that the optimum caching policy is employed on a page by page and portlet by portlet basis, and make sure that your portal is as performant as possible when it is finally deployed in production.

This chapter provides a short overview of the caching options available to page designers and administrators. It includes the following subsections:

- [Section 21.1, "Page Caching"](#)
- [Section 21.2, "Page Assembly Timeout"](#)
- [Section 21.3, "Portlet Caching"](#)
- [Section 21.4, "Template Caching"](#)
- [Section 21.5, "Troubleshooting Page Performance"](#)

The holistic processes involved for performance tuning are not discussed in this chapter. In-depth performance advice and analysis for Oracle Portal is available from the *Performance* page on the Oracle Portal section of the Oracle Technology Network, http://www.oracle.com/technology/products/ias/portal/performance_10g1014.html

Intended Audience

The content of this chapter is intended for users with at least the *Manage* privilege on the pages you will work with. If a particular task requires, or can be performed under, different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges"](#).

21.1 Page Caching

Page caching options are useful for speeding up page response times. This section describes portlet caching options and how to apply them. It includes the following sub-sections:

- [Section 21.1.1, "Changing How a Page Is Cached"](#)
- [Section 21.1.2, "Page Caching Options"](#)
- [Section 21.1.3, "Clearing the Cache for a Page"](#)

21.1.1 Changing How a Page Is Cached

To change how a page is cached:

1. Go to the page where you will change caching options.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** in the page toolbar.
Be sure to click the link for the *page* rather than the *page group*.
4. Go to the **Page Caching** section of the **Main** tab, and select a page caching option.
See [Section 21.1.2, "Page Caching Options"](#) for a description of each caching option.
5. Click **OK** to save your changes.

21.1.2 Page Caching Options

[Table 21–1](#) lists and describes the page caching options (Edit Page: Main tab):

- Cache Page Definition Only at User Level
- Cache Page Definition And Content at User Level For [] Minutes
- Cache Page Definition Only at System Level
- Cache Page Definition And Content at System Level For [] Minutes
- Don't Cache

Table 21-1 Page caching options

Option	Description
Cache Page Definition Only at User Level	<p data-bbox="699 268 1406 323">Caches the page definition for each user, in both Oracle Web Cache and the Portal Cache. The page definition includes:</p> <ul data-bbox="699 338 1179 485" style="list-style-type: none"> <li data-bbox="699 338 1162 363">■ Metadata describing the page structure <li data-bbox="699 375 1179 401">■ Identification of any portlets on the page <li data-bbox="699 413 1036 438">■ Items that exist on the page <li data-bbox="699 451 1167 476">■ Identification of styles used on the page <p data-bbox="699 495 1435 575">Choose this option for pages with dynamic portlet content and where the page definition is user specific. For example, user specific page definitions might contain:</p> <ul data-bbox="699 590 1386 772" style="list-style-type: none"> <li data-bbox="699 590 980 615">■ Page personalizations <li data-bbox="699 627 1062 653">■ Items with item level security <li data-bbox="699 665 1386 690">■ Navigation items: Page Link, Page Path, Login/Logout Link <li data-bbox="699 703 1349 728">■ Portal Smart Link items: Edit, Personalize, Personal Page <li data-bbox="699 741 1081 766">■ Portal Smart Text: Current User <p data-bbox="699 785 805 810">Note that:</p> <ul data-bbox="699 825 1448 1272" style="list-style-type: none"> <li data-bbox="699 825 1414 850">■ Storing data for each user can impact storage and performance. <li data-bbox="699 863 1435 995">■ This option eliminates page regeneration on <i>every</i> request by a user. The page definition is generated the first time a user accesses a page. The portlet content is retrieved and the page is assembled on each request. This allows the page to display dynamic portlet content. <li data-bbox="699 1008 1435 1119">■ It is not necessary to choose this option when your page contains portlet content that is user specific. You can specify the caching level of portlets separately, at the portlet instance level. See Section 21.3, "Portlet Caching". <li data-bbox="699 1131 1435 1243">■ Even if the page content is user specific because it contains secure tabs and secure sub-page links, the page definition is not user specific because these are cached at the user level, separately from the page definition. <li data-bbox="699 1255 1435 1281">■ This option is available for Standard, Mobile, and JSP pages only.

Table 21–1 (Cont.) Page caching options

Option	Description
Cache Page Definition And Content at User Level For [] Minutes	<p data-bbox="618 260 1354 365">Caches the page definition (as described in the previous option), <i>and</i> the assembled page's content, including all portlet content, for a specified period of time, for each user. This is called user-level expiry-based caching.</p> <p data-bbox="618 380 1354 457">Choose this option for pages with portlets that do not change within the specified time period and where the page content (either the page definition or portlet content) is user specific.</p> <p data-bbox="618 472 727 499">Note that:</p> <ul data-bbox="618 514 1354 989" style="list-style-type: none"> <li data-bbox="618 514 1354 699">■ This option reduces load on the Parallel Page Engine and Oracle Portal middle-tier servers and improves performance. It eliminates assembly of the page content and regeneration of the page definition and portlet content on every request by a user. However, expiry-based caching caches the portlet content in the assembled page and therefore some portlet content may be stale when the page is retrieved from the cache. <li data-bbox="618 714 1354 762">■ Fully-assembled pages are cached in Oracle Web Cache and the browser, but not in the Portal Cache. <li data-bbox="618 777 1354 825">■ When the page definition changes, the cached, fully-assembled page in Oracle Web Cache is invalidated. <li data-bbox="618 840 1354 945">■ If the page includes a <i>Refresh</i> Smart Link (either directly in the page or within a navigation page portlet in the page), the link will be displayed to logged-in users. When you click this link, the page is regenerated from the database. <li data-bbox="618 959 1354 989">■ This option is available for Standard and Mobile pages only.

Table 21–1 (Cont.) Page caching options

Option	Description
Cache Page Definition Only at System Level	<p data-bbox="699 260 1446 310">Caches the page definition once for <i>all</i> users. The page definition is the same for all users and includes:</p> <ul data-bbox="699 327 1179 474" style="list-style-type: none"> <li data-bbox="699 327 1162 354">■ Metadata describing the page structure <li data-bbox="699 365 1179 392">■ Identification of any portlets on the page <li data-bbox="699 403 1036 430">■ Items that exist on the page <li data-bbox="699 441 1167 468">■ Identification of styles used on the page <p data-bbox="699 485 1433 535">Choose this option for pages with dynamic portlet content, where the page definition is the same for all users.</p> <p data-bbox="699 552 1446 709">This option greatly reduces storage requirements and improves performance. It eliminates regeneration of the page definition on every request, by any user. The page definition is generated the first time any user accesses the page. The portlet content is retrieved and the page is assembled on each request and this allows the page to display dynamic portlet content.</p> <p data-bbox="699 726 1019 753">This option can be used when:</p> <ul data-bbox="699 770 1442 909" style="list-style-type: none"> <li data-bbox="699 770 1442 842">■ Portlet content is user specific - The cache level of portlets on the page can be specified separately at the portlet instance level. See Section 21.3, "Portlet Caching". <li data-bbox="699 858 1442 909">■ Page contains secure tabs and secure sub-page links - These are cached at the user level, separately from the page definition. <p data-bbox="699 926 1040 953">Do not choose this option when:</p> <ul data-bbox="699 970 1446 1283" style="list-style-type: none"> <li data-bbox="699 970 1446 1066">■ Pages are personalizable - Page personalizations are not possible given that the page is the same for all users. With this option, the Personalize link and all other personalization controls are disabled. <li data-bbox="699 1083 1442 1134">■ Items must display differently based on the user - Items display the same for all users. <li data-bbox="699 1150 1446 1283">■ Approvals and notifications are enabled - System level caching is not appropriate for approval-enabled pages, as these pages are not expected to display the same content to all users. See also Section 5.4.2, "Enabling Approvals and Notifications for a Page Group". <p data-bbox="699 1299 1414 1350">If page performance is critical, you might use this option if the page definition contains certain user specific items:</p> <ul data-bbox="699 1367 1312 1505" style="list-style-type: none"> <li data-bbox="699 1367 1029 1394">- Items with item level security, <li data-bbox="699 1404 1312 1432">- Navigation items (Page Link, Page Path, Login/Logout), <li data-bbox="699 1442 1036 1470">- Portal Smart Link items (Edit), <li data-bbox="699 1480 1062 1507">- Portal Smart Text (Current User). <p data-bbox="699 1524 1446 1703">If you do this, these items are displayed the same to all users, regardless of their access privileges. Whilst this is not ideal visually, users can still perform only the actions for which they have the appropriate access privileges. For example, if your page contains an Edit link, every user viewing the page sees the Edit link even if they do not have Edit privileges. All security checks are deferred until a user clicks on the link.</p> <p data-bbox="699 1719 1393 1774">Note: This option is available for Standard, Mobile, and JSP pages only.</p>

Table 21–1 (Cont.) Page caching options

Option	Description
Cache Page Definition and Content at System Level for [] Minutes	<p data-bbox="618 260 1375 369">Caches the page definition (as described in the previous option), <i>and</i> the assembled page's content, including all portlet content, for a specified period of time, for <i>all</i> users. This is called system-level expiry-based caching.</p> <p data-bbox="618 380 1375 457">Choose this option for pages with portlets that do not change within the specified time period and where the page content (both the page definition and portlet content) is the same for all users.</p> <p data-bbox="618 468 727 499">Note that:</p> <ul data-bbox="618 510 1375 968" style="list-style-type: none"> <li data-bbox="618 510 1375 674">■ The page is not dynamically assembled when any user requests the page, so this is the best choice for minimizing the load on the Parallel Page Engine and Oracle Portal middle-tier servers. However, expiry-based caching caches the portlet content in the assembled page, so some content may be stale when the page is retrieved from the cache. <li data-bbox="618 684 1375 741">■ Fully-assembled pages are cached in Oracle Web Cache and the browser, but not in the Portal Cache. <li data-bbox="618 751 1375 808">■ When the page definition changes, the cached, fully-assembled page in Oracle Web Cache is invalidated. <li data-bbox="618 819 1375 928">■ If the page includes a <i>Refresh</i> Smart Link (either directly in the page or within a navigation page portlet in the page), the link will be displayed to logged-in users. When you click this link, the page is regenerated from the database. <li data-bbox="618 938 1375 968">■ This option is available for Standard and Mobile pages only. <p data-bbox="618 978 963 1010">Do not choose this option when:</p> <ul data-bbox="618 1020 1375 1419" style="list-style-type: none"> <li data-bbox="618 1020 1375 1129">■ Pages are personalizable - Page personalizations are not possible given that the page is the same for all users. With this option, the Personalize link and all other personalization controls are disabled. <li data-bbox="618 1140 1375 1270">■ Content must display differently based on the user - A single copy of the page is displayed to all users. Portlets display only public content. All of the page's tabs, sub-page links, and items are displayed to all users. Users can still perform only the actions for which they have the appropriate access privileges. <li data-bbox="618 1281 1375 1419">■ Approvals and notifications are enabled - System level caching is not appropriate for approval-enabled pages, as these pages are not expected to display the same content to all users. See also Section 5.4.2, "Enabling Approvals and Notifications for a Page Group".
Don't Cache	<p data-bbox="618 1430 862 1461">Disables page caching.</p> <p data-bbox="618 1472 1375 1581">Note that the use of this option will adversely impact portal performance. Do not use this option except where absolutely necessary. Do not use this option on frequently accessed pages. Keep the number of pages that require this option to a minimum.</p> <p data-bbox="618 1591 1375 1623">You may want to disable page caching in the following circumstances:</p> <ul data-bbox="618 1633 1375 1885" style="list-style-type: none"> <li data-bbox="618 1633 1375 1764">■ Your page contains PL/SQL items or URL items that are displayed in place (that is, they are displayed directly on the page) and that produce dynamic content that must always be up-to-date (a portlet that is not cached or that uses a short expiry would be a better choice for this kind of content). <li data-bbox="618 1774 1375 1885">■ You are concerned that a soft-invalidation event, such as a change to user group membership, may result in a cached version of a page being viewed by an active user who has recently lost privileges on the page.

21.1.3 Clearing the Cache for a Page

You can manually clear the cache entries associated with a page. For example, this might be useful if you revoke a user's privileges on a page and you want to make sure that your privilege level changes are applied immediately. If you do not clear the cache, the user will still be able to access the page if it is in the cache.

To clear the cache for a page:

1. Go to the page whose cache must be cleared.
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** in the page toolbar.
Be sure to click the link for the *page* rather than the *page group*.
4. Go to the **Page Caching** section of the **Main** tab, and select **Clear Cache**.
5. Click **OK** to return to the page.

21.2 Page Assembly Timeout

The page assembly timeout setting enables you to specify how long to delay displaying a page while it assembles the portlets.

This option is useful when the page is known to have a potentially slow portlet, perhaps one that is running remotely on a slow server far away. Instead of having that one portlet hold up the final page assembly, you can use the page assembly timeout option to specify a cut-off time. In place of any portlet that has not yet responded, the partially rendered page makes a new browser-based request for the portlet's content.

Note: Page assembly timeout does not work in combination with browser script debugging. If you need to debug your page, disable page assembly timeout before turning on script debugging in your browser. After you have fixed any script issues you can turn off script debugging and enable page assembly timeout.

You will also need to recommend to your users that they turn off script debugging in their browsers for the portal to behave as expected.

To specify the page assembly timeout:

1. Go to the page where you will change caching options.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** in the page toolbar.
Be sure to click the link for the *page* rather than the *page group*.
4. Go to the **Page Assembly Timeout** section of the **Main** tab, and select a page assembly timeout option:
 - **Wait For All Portlets to Return Before Displaying the Page (Default)**
Select this option to delay the display of a page until all portlets have been assembled on the server and are ready for delivery to a browser.

- **Limit Time Spent Fetching Portlets to [] Seconds**

Select this option to limit the amount of time the server will delay page display while it assembles portlets. Specify the time out in seconds. Any portlets not assembled before the time out will be rendered dynamically by the browser after the page is displayed.

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

21.3 Portlet Caching

Portlet caching options are useful for speeding up page response times. This section describes portlet caching options and how to apply them. It includes the following sub-sections:

- [Section 21.3.1, "Changing How a Portlet Is Cached"](#)
- [Section 21.3.2, "Portlet Caching Options"](#)

21.3.1 Changing How a Portlet Is Cached

To change how a portlet is cached:

1. Go to the page where the portlet instance is located.
For information on locating a page, see [Section 8.1, "Locating Pages in Oracle Portal"](#).
2. Switch to **Edit** mode.
3. Click the **Actions** icon ([Figure 21–1](#)) next to the portlet instance.

Figure 21–1 The Actions Icon



4. On Actions page, click the **Edit Portlet Instance** link.
5. In the **Portlet Caching** section, specify how this portlet instance is cached.
For more detail, see [Section 21.3.2, "Portlet Caching Options"](#).
6. In the **Portlet Caching Level** section, specify a caching level for this portlet instance.
For more detail and a description of each caching level, see [Section 21.3.3, "Portlet Caching Level Options"](#).
7. Click **OK** to save your changes and return to the page.

21.3.2 Portlet Caching Options

[Table 21–2](#) lists and describes Portlet Caching options on the Edit Portlet Instance page:

- Rely on Portlet to Implement Caching
- Force Portlet to be Cached for [] Minutes

Table 21–2 Portlet Caching Options

Option	Description
Rely on Portlet to Implement Caching	By default, a portlet instance is only cached if the portlet author implemented caching for the portlet. The portlet's caching implementation is suitable for most portlet instances. If you find that the portlet performance on your page is not acceptable, you can change how the portlet is cached by selecting the option described next, Force Portlet to be Cached for [] Minutes .
Force Portlet to be Cached for [] Minutes	<p>Enter the duration (in minutes) for which content from this portlet instance is cached in the Oracle Portal file system cache.</p> <p>After the portlet content is generated, it is stored in the Portal Cache for the specified duration. This is called expiry-based caching. If the portlet content is requested while assembling page content during this period, there is a cache hit and the portlet does not need to be contacted. This caching is in addition to any caching that is implemented by the portlet.</p> <p>Select this option to improve page performance in cases where a portlet does not implement caching, or the caching implementation does not provide enough performance benefit. For example, the portlet may use validation-based caching but the validation check is too expensive, or the portlet uses expiry-based caching but the expiry period is too short.</p> <p>Setting this option can improve page performance because the portlet is not contacted on each request. However, if the portlet's content changes within the specified time, the portlet may display stale content. This may be acceptable in some portlet applications, where a fast(er) page response is deemed more important than frequently refreshed content.</p> <p>When setting this option, note that:</p> <ul style="list-style-type: none"> ■ If the portlet also specifies an expiry period for its content, the longer expiry period is used. ■ For the period specified, setting this option overrides any validation-based caching that the portlet may specify. ■ For a Page portlet, the assembled Page portlet content is stored in the Portal Cache in addition to any page caching specified on the Page portlet.

21.3.3 Portlet Caching Level Options

[Table 21–3](#) lists and describes **Portlet Caching Level** options on the Edit Portlet Instance page:

- Page's Caching Level
- User Level Caching
- System Level Caching

The **Portlet Caching Level** option enables you to modify the caching level in either the caching policy defined by the portlet author, or the forced caching policy (see **Force Portlet to be Cached for [] Minutes** in [Table 21–2, "Portlet Caching Options"](#)).

This option does not force the portlet to be cached. This option controls whether user or system level information is sent in the portlet request.

The **Portlet Caching Level** option is not available when:

- The portlet itself specifies system-level caching. If this is the case, the portlet is always cached at the system-level.
- The page is cached with the option **Cache Page Definition and Content at System Level for [] Minutes**. When the page is cached at this level, portlet instances on the page can display only public data.

Note: To ensure that WSRP portlets operate correctly, we recommend that you place WSRP portlets that are cached at the user-level, on user-level cached pages, and place WSRP portlets that are cached at the system-level, on system-level cached pages.

Table 21–3 Portlet Caching Level Options

Option	Description
Page’s Caching Level	If the portlet is cached, it is cached at the page’s caching level—either user level or system level.
User Level Caching	<p>If the portlet is cached, it is cached at the user level. The portlet content is cached for <i>each</i> user. When a portlet is cached at the user level, users may personalize the portlet (if portlet personalizations are allowed).</p> <p>If the portlet’s caching policy specifies that the portlet is not cached and the portlet is not forced to be cached using the setting Force Portlet to be Cached for [] Minutes, the portlet will not be cached. However, user level information will be sent with the portlet request.</p> <p>For Page portlets, this option does not affect the page caching specified in the page definition of the source page. However, it does affect the caching of the assembled Page portlet content when using the option Force Portlet to be Cached for [] Minutes.</p>
System Level Caching	<p>If the portlet is cached, it is cached at the system level. The portlet content is cached once for <i>all</i> users.</p> <p>When a portlet is cached at the system level the portlet content is the same for all users. The portlet runs as the public user, and only public data is shown. Portlets that do not contain public data, for example, the Recent Objects portlet or the External Applications portlet, are not displayed.</p> <p>Select this option to improve page performance in cases where a portlet does not need to display user-specific data, the portlet’s caching policy is not already set at the system level, and the portlet is cached either by the portlet’s own caching policy or by using the option Force Portlet to be Cached for [] Minutes.</p> <p>For Page portlets, this option in combination with the Portlet Caching option affect how the Page portlet is displayed:</p> <ul style="list-style-type: none"> ■ If System Level Caching and Rely on Portlet to Implement Caching are selected, the Page portlet displays the same as for the <i>page</i> caching option Cache Page Definition at System Level. ■ If System Level Caching and Force Portlet to be Cached for [] Minutes are selected, the Page portlet displays the same as for the <i>page</i> caching option Cache Page Definition and Content at System Level for [] Minutes (system level expiry-based caching). <p>With this combination, the assembled Page portlet content is stored in the Portal Cache at the system level.</p>

21.4 Template Caching

Template caching options are useful for speeding up template response times. Specifically, for Portal Templates for items, caching speeds up the dynamic assembly of the item within the context of its Portal Template.

Template caching options are not available for Portal Templates for pages. Pages based on templates use their own caching option not the template's caching option. See [Section 21.1, "Page Caching"](#).

This section describes template caching options and how to apply them. It includes the following sub-sections:

- [Section 21.4.1, "Changing How a Portal Template Is Cached"](#)
- [Section 21.4.2, "Portal Template Caching Options"](#)
- [Section 21.4.3, "Clearing the Cache for a Portal Template"](#)

21.4.1 Changing How a Portal Template Is Cached

Portal Template caching options display only for Portal Templates for items. A Portal Template for items is a Portal Template that contains an Item Placeholder item type. For Portal Templates for items, template caching options control the caching level of the template definition and template content.

Note: If, in a Portal Template for items, the item placeholder is deleted, hidden, or expired, caching options nonetheless continue to display on the Main tab. They display until the item is thoroughly removed through a system purge.

To change how Portal Templates for items are cached:

1. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the Portal Template for items.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Under **Portal Templates** in the Layout & Appearances section, click the link to the Portal Template for items.

This opens the template in Edit mode.

3. Click the **Template: Properties** link at the top of the page.
4. Click the **Main** tab to bring it forward.
5. Select a template caching option.

See [Section 21.4.2, "Portal Template Caching Options"](#) for a description of each caching option.

6. Click **OK** to save your changes and return to the template.

21.4.2 Portal Template Caching Options

[Table 21–4](#) lists and describes the template caching options (Edit Portal Template: Main tab):

- Cache Template Definition Only at User Level
- Cache Template Definition and Content at User Level for [] Minutes
- Cache Template Definition Only at System Level
- Cache Template Definition and Content at System Level for [] Minutes
- Don't Cache

Table 21–4 Template caching options

Option	Description
Cache Template Definition Only at User Level	<p>Caches the template definition for each user, in both Oracle Web Cache and the Portal Cache. The definition includes:</p> <ul style="list-style-type: none"> ■ Metadata describing the template structure ■ Identification of any portlets on the template ■ Items that exist on the template ■ Identification of styles used on the template <p>Choose this option for templates with dynamic portlet content and where the template definition is user specific. For example, user specific template definitions might contain:</p> <ul style="list-style-type: none"> ■ Items with item level security ■ Navigation items: Page Link, Page Path, Login/Logout Link ■ Portal Smart Link items: Edit, Personal Page ■ Portal Smart Text: Current User <p>This option eliminates template definition regeneration on every request by a user. The template definition is generated the first time a user accesses the template. However, portlet content is retrieved and the template is assembled on each request. This allows the template to display dynamic portlet content.</p> <p>Note that:</p> <ul style="list-style-type: none"> ■ Storing data for each user can impact storage and performance. ■ It is not necessary to choose this option when your template contains portlet content that is user specific. You can specify the caching level of portlets separately, at the portlet instance level. See Section 21.3, "Portlet Caching". ■ Even if the template content is user specific because it contains secure tabs, the template definition is not user specific because these are cached at the user level, separately from the template definition.
Cache Template Definition And Content at User Level For [] Minutes	<p>Caches the template definition (as described in the previous option), <i>and</i> the assembled template's content, including all portlet content, for a specified period of time, for each user. This is called user-level expiry-based caching.</p> <p>Choose this option for template with portlets that do not change within the specified time period and where the template content (either the template definition or portlet content) is user specific.</p> <p>Note that:</p> <ul style="list-style-type: none"> ■ This option reduces load on the Parallel Page Engine and Oracle Portal middle-tier servers and improves performance. It eliminates assembly of the template content and regeneration of the template definition and portlet content on every request by a user. However, expiry-based caching caches the portlet content in the assembled template and therefore some portlet content may be stale when the template is retrieved from the cache. ■ Fully-assembled templates are cached in Oracle Web Cache and the browser, but not in the Portal Cache. ■ When the template definition changes, the cached, fully-assembled template in Oracle Web Cache is invalidated. ■ If the template includes a <i>Refresh</i> Smart Link (either directly in the template or within a navigation page portlet in the template), the link will be displayed to logged-in users. When you click this link, the template is regenerated from the database.

Table 21–4 (Cont.) Template caching options

Option	Description
Cache Template Definition Only at System Level	<p data-bbox="646 260 1435 310">Caches the template definition once for <i>all</i> users. The template definition is the same for all users and includes:</p> <ul data-bbox="646 327 1166 470" style="list-style-type: none"> <li data-bbox="646 327 1166 352">■ Metadata describing the template structure <li data-bbox="646 365 1166 390">■ Identification of any portlets on the template <li data-bbox="646 403 1166 428">■ Items that exist on the template <li data-bbox="646 441 1166 466">■ Identification of styles used on the template <p data-bbox="646 483 1409 533">Choose this option for template with dynamic portlet content, where the template definition is the same for all users.</p> <p data-bbox="646 550 1435 709">This option greatly reduces storage requirements and improves performance. It eliminates regeneration of the template definition on every request, by any user. The template definition is generated the first time any user accesses the template. The portlet content is retrieved and the template is assembled on each request and this allows the template to display dynamic portlet content.</p> <p data-bbox="646 726 967 751">This option can be used when:</p> <ul data-bbox="646 768 1409 911" style="list-style-type: none"> <li data-bbox="646 768 1409 844">■ Portlet content is user specific - The cache level of portlets on the template can be specified separately at the portlet instance level. See Section 21.3, "Portlet Caching". <li data-bbox="646 856 1409 911">■ Template contains secure tabs- These are cached at the user level, separately from the template definition. <p data-bbox="646 928 987 953">Do not choose this option when:</p> <ul data-bbox="646 970 1435 1113" style="list-style-type: none"> <li data-bbox="646 970 1435 995">■ Items must display differently based on the user <li data-bbox="646 1008 1435 1113">■ Approvals and notifications are enabled - System level caching is not appropriate for approval-enabled templates, as these templates are not expected to display the same content to all users. See also Section 5.4.2, "Enabling Approvals and Notifications for a Page Group". <p data-bbox="646 1129 1435 1180">If template performance is critical, you might use this option if the template definition contains certain user specific items:</p> <ul data-bbox="646 1197 1240 1339" style="list-style-type: none"> <li data-bbox="646 1197 1240 1222">- Items with item level security <li data-bbox="646 1234 1240 1260">- Navigation items: Page Link, Page Path, Login/Logout <li data-bbox="646 1272 1240 1297">- Portal Smart Link items: Edit <li data-bbox="646 1310 1240 1335">- Portal Smart Text: Current User <p data-bbox="646 1352 1409 1461">If you do this, the items are displayed the same to <i>all</i> users, regardless of their access privileges. Whilst this is not ideal visually, users can still perform only the actions for which they have the appropriate access privileges.</p>

Table 21–4 (Cont.) Template caching options

Option	Description
Cache Template Definition and Content at System Level for [] Minutes	<p>Caches the template definition (as described in the previous option), <i>and</i> the assembled template's content, including all portlet content, for a specified period of time, for <i>all</i> users. This is called system-level expiry-based caching.</p> <p>Choose this option for templates with portlets that do not change within the specified time period and where the template content (both the template definition and portlet content) is the same for all users.</p> <p>Note that:</p> <ul style="list-style-type: none"> ■ The template is not dynamically assembled when any user requests the template, so this is the best choice for minimizing the load on the Parallel Page Engine and Oracle Portal middle-tier servers. However, expiry-based caching caches the portlet content in the assembled template, so some content may be stale when the template is retrieved from the cache. ■ Fully-assembled templates are cached in Oracle Web Cache and the browser, but not in the Portal Cache. ■ When the template definition changes, the cached, fully-assembled template in Oracle Web Cache is invalidated. ■ If the template includes a <i>Refresh</i> Smart Link (either directly in the template or within a navigation page portlet in the template), the link will be displayed to logged-in users. When you click this link, the template is regenerated from the database.
Do not choose this option when:	<p>Do not choose this option when:</p> <ul style="list-style-type: none"> ■ Content must display differently based on the user - A single copy of the template is displayed to all users. Portlets display only public content. All of the template's tabs and items are displayed to all users. Users can still perform only the actions for which they have the appropriate access privileges. ■ Approvals and notifications are enabled - System level caching is not appropriate for approval-enabled templates, as these templates are not expected to display the same content to all users. See also Section 5.4.2, "Enabling Approvals and Notifications for a Page Group".
Don't Cache	<p>Disables template caching. With this option you do not gain any of the performance benefits provided by caching.</p> <p>The use of this option will adversely impact portal performance. Do not use this option except where absolutely necessary. Do not use this option on frequently accessed templates. Keep the number of templates that require this option to a minimum.</p> <p>You may want to disable template caching in the following circumstances:</p> <ul style="list-style-type: none"> ■ Your template contains PL/SQL items or URL items that are displayed in place (that is, they are displayed directly on the template) and that produce dynamic content that must always be up-to-date (a portlet that is not cached or that uses a short expiry would be a better choice for this kind of content). ■ You are concerned that a soft-invalidation event, such as a change to user group membership, may result in a cached version of a template being viewed by an active user who has recently lost his privileges on pages that use the template.

21.4.3 Clearing the Cache for a Portal Template

You can manually clear the cache entries associated with a Portal Template. For example, this might be useful if you revoke a user's privileges on an item associated

with a template and you want to make sure that your privilege level changes are applied immediately. If you do not clear the cache, the user will still be able to access the item if the template is in the cache.

To clear the cache for a Portal Template:

1. From the Page Groups portlet **Work In** drop-down list, select the page group that owns the Portal Template.

By default, the Page Groups portlet is located on the Build tab of the Portal Builder page.

2. Under **Portal Templates** in the Layout & Appearances section, click the link to the Portal Template.

This opens the template in Edit mode.

3. Click the **Template: Properties** link at the top of the page.

4. Do one of the following:

- (Portal Template for *items* only) Click the **Main** tab, and select **Clear Cache**.
- (Portal Template for *pages* and *items*) Click the **Access** tab, and select **Clear Cache**.

5. Click **OK** to return to the Portal Template.

21.5 Troubleshooting Page Performance

Performance issues are not discussed in this chapter. In-depth performance advice and analysis for Oracle Portal is available from the *Performance* page on the Oracle Portal section of the Oracle Technology Network,

<http://www.oracle.com/technology/products/ias/portal/index.html>

Using Parameters and Events

This chapter defines parameters and events as they are used in Oracle Portal and describes how to use them.

Figure 22-1 Use Parameters and Events to Control Page Information



It includes the following subsections:

- [Section 22.1, "Understanding Parameters"](#)
- [Section 22.2, "Understanding Events"](#)
- [Section 22.3, "Adding a Parameter to a Page or Portal Template"](#)
- [Section 22.4, "Passing Parameter Values to Portlets"](#)

- [Section 22.5, "Setting Up Events on a Page"](#)
- [Section 22.6, "Assigning Parameter Values to Items Displayed on a Portal Template"](#)
- [Section 22.7, "Troubleshooting Parameters and Events"](#)

Intended Audience

The content of this chapter is intended for users with at least the *Manage Content* privilege on the pages they will work with. To work with Portal Templates, the *Manage Template* privilege is required on the page group. If a particular task requires, or can be performed under, different privileges, those privileges will be listed before the steps of that task. For more information on page privileges, see [Section B.3, "Page and Tab Privileges"](#).



For page groups, parameters and events are enabled by default. For more information, see [Chapter 4, "Working with Page Groups"](#). For information on how to add parameters and events to portlets, see the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

22.1 Understanding Parameters

Two types of objects in Oracle Portal can use parameters; pages and portlets. A *page parameter* stores a value for a page and a *portlet parameter* stores a value for a portlet.

The following sections describes *page parameters* and *portlet parameters* and how to use them in Oracle Portal:

- [Section 22.1.1, "Understanding Page Parameters"](#)
- [Section 22.1.2, "Understanding Portlet Parameters"](#)

22.1.1 Understanding Page Parameters

Page parameters accept and store values for a page. Their presence on a page means that page information can be different depending on where the page is called from, or who is viewing the page. For example, you could define a page parameter on a page that displays a stock ticker portlet so that a different portfolio is displayed depending on value of the page parameter. Page parameters can be defined for Standard, Mobile, and Search pages, custom pages that are based on these page types, and navigation pages.

In Oracle Portal, parameters and events are enabled for page groups, by default. For information on enabling/disabling parameters and events in a page group, see [Chapter 4, "Working with Page Groups"](#).

A page parameter gets its value from (in order of precedence):

- the URL used to access the page, for example:

```
http://myportal/mypage?a=1&b=2
```

Parameters are case-sensitive, so if your parameter name is *a*, entering *a=1* will work, but *A=1* will not.

- the personalized value of the parameter, as specified by the current user
- the default value of the parameter, as specified by the page designer

22.1.1.1 Page Parameters in URL Pages

You can define page parameters for URL pages. The page parameters (and their values) are passed to the location that is specified by the URL page. For example, if the URL page `myurlpage` points to the URL `http://www.yahoo.com/somepage` and values are defined for page parameters `a` and `b` (`a=1` and `b=2`), this URL is used to access the page in Oracle Portal:

```
http://myportal/myurlpage?a=1&b=2
```

The parameter values are passed to the location specified for the page and this generates the following URL:

```
http://www.yahoo.com/somepage?a=1&b=2
```

22.1.2 Understanding Portlet Parameters

Portlet parameters accept and store values for portlets. This means that information displayed in a portlet can be specific to a particular page or user. A portlet's parameters are specified in the file `provider.xml`.

There are two types of portlet parameter, *public* and *private*:

- Public portlet parameters are displayed to page designers. This allows page designers to assign appropriate parameter values and make the information displayed in the portlet specific to their page. The page designer can provide a specific value (constant), a system variable (for example, `USER`), or a page parameter.

To set values for portlet parameters, the page group setting **Enable Parameters and Events** must be enabled, see [Chapter 4, "Working with Page Groups"](#).

- Private portlet parameters are used internally by the portlet, for example, to identify the current row displayed, or the current tab displayed. Private portlet parameters are not displayed to the page designer.

For example, a Stock Ticker portlet could have a public portlet parameter (`ticker`) that accepts a stock symbol as its value. When this portlet is placed on a page, the public ticker parameter is displayed on the **Edit Page: Parameters** tab. If the page designer sets the ticker parameter to a specific value, such as `ORCL`, the portlet shows stock information for this company when it is displayed.

Alternatively, the page designer could add a page parameter (for example, `symbol`) to the page, and pass that page parameter to the portlet parameter. If the page parameter is personalizable, users can set the stock ticker portlet to display stock information for any company they choose.



For information on how to add parameters to your portlets, see the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

22.2 Understanding Events

An event is something that happens when a link or button is clicked in a portlet. A portlet's events are specified in the file `provider.xml`. When a portlet (with events) is placed on an Oracle Portal page, the page designer can choose what happens when the event occurs. The options are:

- Go to another page, and optionally pass values to that page's parameters.



- Redisplay the current page.

For information on setting up a portlet event handler for your portlets, see the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

22.3 Adding a Parameter to a Page or Portal Template

Page parameters accept and store values for a page. This means that page information can be different depending on where the page is called from, or who is viewing the page.

In Oracle Portal you can add page parameters to pages and Portal Templates. When you add page parameters to a Portal Template for pages, the parameters are inherited by every page based on the Portal Template. Page designers can edit the template's page parameters when they edit the template but not when they edit the pages based on this template. When you add parameters to a Portal Template for items, the parameter values become available to every portlet placed on the Portal Template. For more information, see [Section 12.1.1, "What Are Portal Templates?"](#).

To add a parameter to a page, or a Portal Template:

1. Go to the page, or template where you will add a parameter.
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** (or **Template**) in the page toolbar.

Be sure to click the link for the *page* (or *template*) rather than the *page group*.

4. On the Properties page, click the **Parameters** tab to bring it forward.

For page groups, parameters and events are enabled by default. If you cannot see the Parameters tab, the **Enable Parameters and Events** page group setting has been disabled. For more information, see [Chapter 4, "Working with Page Groups"](#).

5. In the **Parameter Name** field, enter a name for the parameter.

The name is case sensitive and must be unique within the page (or template). The name can contain up to 200 characters. The name can contain only alphanumeric characters (A-Z, a-z, 0-9) and the underscore (_) character. Do not use spaces or other special characters.

6. Click **Add**.

The parameter is added to the page (or template) and you can edit its properties in the **Page Parameter Properties** section.

7. In the **Display Name** field, enter a descriptive name for the parameter.

Use to 4000 characters of any kind, including spaces.

8. (Optional) In the **Default Value** field, enter the value that you want to have assigned to the parameter if no other value is provided.

This field is available only for Standard and Mobile pages and pages of custom types that are based on the Standard page type.

9. (Optional) Select **Personalizable** if you want users who personalize the page (or any page based on this template) to be able to provide their own value for the parameter.

This field is available only for Standard and Mobile pages and pages of custom types that are based on the Standard page type.

This option is not applicable for Portal Template for items.

10. (Optional) In the **Description** field, enter a description of the parameter.

If users can personalize the value of this page parameter (**Personalizable** check box is selected), use the description to provide users with hints or an example of the kind of value to provide for the parameter. The description can contain up to 4000 characters.

This option is not applicable for Portal Template for items.

11. Click **Apply** to save your changes and create another parameter, or click **OK** to save your changes and return to the page or template.

If you want to add another parameter before you leave this page, click **Apply** before creating the next parameter; otherwise, you will lose any changes you made to the first parameter's properties.

Note: You can add a maximum of 2000 parameters to a page. If you add more than 2000 parameters, the following error message is logged when the request is processed:

```
ERROR: Repository Gateway error: Request Processing
Error: Too many arguments passed in. Got <n>
parameters. Upper limit is 2000
```

22.4 Passing Parameter Values to Portlets

Portlets can accept values for their parameters from page parameters, system variables, or a constants passed from the page. This means that the information displayed within a portlet can be specific to a particular page or user. A portlet's parameters are specified in the file `provider.xml`.

You can pass values only to portlet parameters on Standard, Mobile, and Search pages, custom pages that are based on these page types, and navigation pages.

In Oracle Portal you can specify portlet parameter values for a particular page or for a Portal Template. When you specify portlet parameter values for a Portal Template for pages, the values are inherited by every page based on the Portal Template. Page designers can edit the template's parameter values when they edit the template but not when they edit the pages based on this template. When you specify parameters values for a Portal Template for items, they become the default values for items displayed on that template. For more information, see [Section 12.1.1, "What Are Portal Templates?"](#).

To pass values to portlet parameters:

1. Go to the page (or template) that hosts the portlets to which you will pass parameter values.
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** (or **Template**) in the page toolbar.
Be sure to click the link for the *page* (or *template*) rather than the *page group*.
4. On the Properties page, click the **Parameters** tab to bring it forward.

For page groups, parameters and events are enabled by default. If you cannot see the Parameters tab, the **Enable Parameters and Events** page group setting has been disabled. For more information, see [Chapter 4, "Working with Page Groups"](#).

5. The **Portlet Parameter Values** section lists the portlets that are included on the page and indicates whether those portlets have any parameters.

Click the name of a portlet to expand the portlet and display its parameters. If a portlet does not have any parameters defined, it cannot be expanded in the list.

If you want to show the parameters for all the portlets on the page, click **Expand All**. However, if a portlet does not have any parameters, you cannot expand it in the list.
6. For each portlet parameter:
 - a. From the input parameter drop-down list, choose:
 - Null** if you do not want to provide a value for the portlet parameter.
 - Page Parameter** to pass the value of one of the page parameters to the portlet parameter.
 - System Variable** to pass the value of a system variable to the portlet parameter. For example, `USER_NAME`.
 - Constant** to pass a specific value to the portlet parameter.
 - b. In the value field or list, choose the page parameter or system variable whose value you want to pass to the portlet, or enter a constant value.
7. Click **OK** to save your changes and return to the page or template.



For information on adding parameters to a portlet, see the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

22.5 Setting Up Events on a Page

An event is something that happens when a link or button is clicked in a portlet. A portlet's events are specified in the file `provider.xml`.

You can set up events only on Standard or Mobile pages or custom pages that are based on the Standard page type. You can also set up events on Portal Templates.

To set up events on a page, or a Portal Template:

1. Go to the page or template where you will set up events.
2. Switch to **Edit** mode.
3. Click the **Properties** link next to **Page** (or **Template**) in the page toolbar.

Be sure to click the link for the *page* (or *template*) rather than the *page group*.
4. On the Properties page, click the **Events** tab to bring it forward.

For page groups, parameters and events are enabled by default. If you cannot see the Events tab, the **Enable Parameters and Events** page group setting has been disabled. For more information, see [Chapter 4, "Working with Page Groups"](#).
5. Click the name of the portlet you will work with.

If you want to show the events for all the portlets on the page, click **Expand All**; however, if a portlet does not have any events, you cannot expand it in the list.

6. Click the event for which you will specify an action.
7. Select:
 - **Go to Page** to display a particular page when the event occurs.
Click the **Browse** icon and select a page to display from the list provided.
 - **Redisplay Page** to refresh the page when the event occurs.

If you want to refresh the current page with new parameter values so they can be passed with an event, choose **Go to Page** and then choose the name of the current page. If you choose **Redisplay Page**, the current page is not refreshed with new parameter values (if there are any).

8. If you selected **Go to Page** in the previous step, the **Page Input** section lists any page parameters that are defined for the page. For each page parameter:
 - a. From the drop-down list, choose:
 - Null** if you do not want to provide a value for the page parameter.
 - Event Output** to pass the value of one of the portlet event output parameters to the page parameter when the event occurs.
 - System Variable** to pass the value of a system variable to the page parameter when the event occurs; for example, `USER_NAME`.
 - Constant** to pass a specific value to the page parameter when the event occurs.
 - b. In the value field or list, choose the event output or system variable whose value you want to pass to the page parameter, or enter a constant value.
9. Click **OK** to save your changes and return to the page or template.



For information on adding events to your portlets, see the *Oracle Fusion Middleware Developer's Guide for Oracle Portal* available on the Oracle Portal documentation page of the Oracle Technology Network at <http://www.oracle.com/technology/products/ias/portal/documentation.html>.

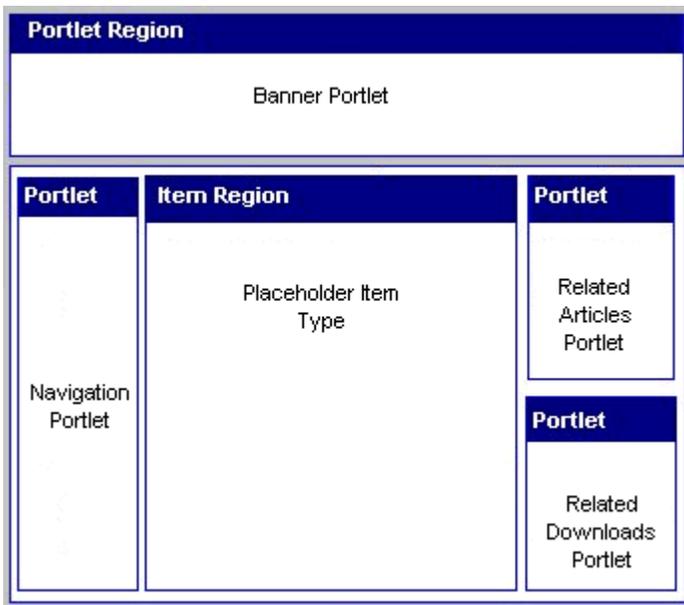
22.6 Assigning Parameter Values to Items Displayed on a Portal Template

When an item is assigned to a Portal Template, the item is always displayed within the context of that template. For more information, see [Section 12.2.2, "Using Portal Templates with Items"](#).

If the template contains one or more portlets, you can make the content of each portlet dependent on the item being displayed. You can configure items to pass parameter values to the template, and the surrounding portlets can decide whether or not to use the information to generate their content.

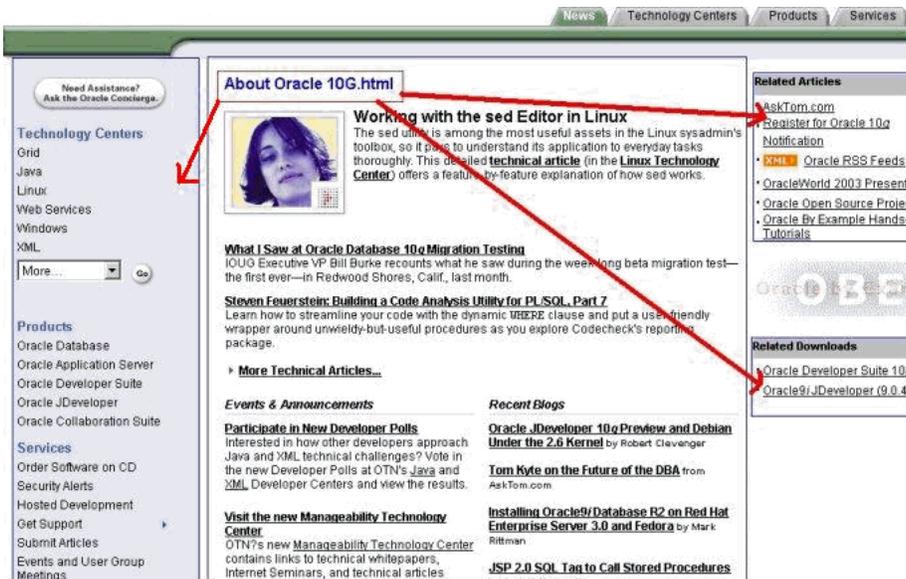
For example, consider the Portal Template for items illustrated in [Figure 22-2](#). The center region contains the placeholder item type. The region on the left contains a navigation portlet that displays the navigation links relevant to the item being displayed on the template. On the right there are two portlets, one displaying *Related Articles* and the other *Related Downloads*. When an item is displayed with this template, it could pass parameters to the template. The parameters can pass values on to the portlets (Template properties: Parameter tab) such that all three portlets display content that is relevant to the item.

Figure 22–2 Portal Template for Items - Sample Layout



For example, when the item *About Oracle 10g.html* is displayed on the template, it passes parameters to the other portlets on the page as shown in [Figure 22–3](#). Notice how links in the navigation portlet, related articles, and related downloads are all associated with the item in the center, that is, *Oracle Database 10g*.

Figure 22–3 Portal Template for Items - Sample Item



If you want portlets, placed on Portal Template for Items, to display information relevant to the item currently being displayed with the template, here is an overview of the steps required:

1. Design a suitable template for your items, see [Section 12.2.2.1, "Creating Portal Templates for Items"](#).

Ensure that the template contains a placeholder item type and the portlets to which your items will pass parameter values.

2. Add page parameters to the Portal Template and assign default parameter values to pass to portlets on the template, see [Section 22.3, "Adding a Parameter to a Page or Portal Template"](#).
3. Define parameter values for items assigned to the Portal Template, see [Section 22.6.1, "Defining Parameter Values for Items Displayed on a Portal Template"](#).

22.6.1 Defining Parameter Values for Items Displayed on a Portal Template

If a Portal Template for items contains page parameters, you can specify parameter values for each item that is assigned to the Portal Template. When the item is displayed on its designated Portal Template, the parameter values are passed to the portlets on the template, controlling the portlet content that is displayed.

To define parameter values for items assigned to a Portal Template:

1. Go to the page or template where you will add a parameter.
2. Switch to **Edit** mode.
3. Click the **Page: Properties** link in the toolbar at the top of the page.
4. On the resulting page, click the **Items** tab to bring it forward.
5. Select **Use this portal template** and then select the required Portal Template for the items on this page.

Page parameters for the selected template are displayed beneath this radio button (under **Template Input**). If no parameters are defined, you cannot assign parameter values. See [Section 22.3, "Adding a Parameter to a Page or Portal Template"](#).

6. From the drop-down list for the first parameter, choose:

Null if you do not want items on this page to provide a value for this page parameter.

Page to pass page details to the page parameter on the Portal Template.

System Variable to pass the value of a system variable to the page parameter on the Portal Template; for example, USER_NAME.

Constant to pass a specific value to the page parameter on the Portal Template.

7. In the value field or list, choose the page or system variable whose value you want to pass to the page parameter, or enter a constant value.
8. Define values for all remaining page parameters on the Portal Template.
9. Click **OK** to return to the page.

If a user clicks an item link on this page, these values are passed to the corresponding page parameters on the designated Portal Template for items.

You can specify different parameter values for individual items on the page if required, see [Section 22.6.1.1, "Overriding Parameter Values for an Item Displayed on a Portal Template"](#).

22.6.1.1 Overriding Parameter Values for an Item Displayed on a Portal Template

If you enable the page option **Allow items on this page to use a different Portal Template**, values for Portal Template parameters can be defined for each item. This enables you to override a Portal Template parameter value for a particular item on a page, should a different value be required.

1. Click the **Page: Properties** link in the toolbar at the top of the page.
2. On the resulting page, click the **Items** tab to bring it forward.
3. Select the **Allow items on this page to use a different Portal Template** check box.
(Optional) Select **Use this portal template** and then choose a *default* template for the items on this page. You can also specify default values for page parameters on the designated template if you wish. The defaults are assigned to each item on this page, but you can override the defaults for individual items as described in the following steps.
4. Click **OK** to return to the page.
5. Click the **Edit** icon beside the item to which you will assign specific page parameter values.
6. Select **Use this portal template** and then select the required Portal Template for items.
Page parameters for the selected Portal Template are displayed beneath this radio button (under **Template Input**). If no parameters are defined you cannot assign parameter values. See [Section 22.3, "Adding a Parameter to a Page or Portal Template"](#).
7. From the drop-down list for the first parameter, choose:
Null if you do not want this item to provide a value for this page parameter.
Page to pass page details to the page parameter on the Portal Template.
System Variable to pass the value of a system variable to the page parameter on the Portal Template; for example, `USER_NAME`.
Constant to pass a specific value to the page parameter on the Portal Template.
8. In the value field or list, choose the page or system variable whose value you want to pass to the page parameter, or enter a constant value.
9. Define values for all remaining page parameters on the Portal Template.
10. Click **OK** to return to the page.
If a user clicks the link for this item, these parameter values are passed to the designated Portal Template for items.

22.7 Troubleshooting Parameters and Events

I want to edit a page parameter but it is inherited from a template.

When an *Inherited from Template* icon appears next to a page parameter, it means that the page parameter is inherited from the Portal Template on which the page is based. To edit, delete, or move a page parameter that is inherited from a Portal Template, you must edit, delete, or move the parameter in the template itself.

Similarly, if an event is associated with a portlet that is inherited from a Portal Template, you must edit the event in the template itself.

My Page portlet includes a parameter but I am not sure what syntax to use.

The Page portlet includes a parameter (named *Page*) that, if used, requires a value in the format PAGEGROUPID_PAGEID. To make use of this on a regular page, you must either:

- Assign a constant value, such as 6_1, directly to the Page portlet's parameter.
- Create a page parameter, map it to the Page portlet's parameter, then assign a value, such as 6_1, to the page parameter.

To obtain values for PAGEGROUPID and PAGEID, enter page Edit mode and display page properties by clicking the Page Properties icon in the toolbar at the top of the page.

When you use the Page parameter to define a page for your Page portlet, it overrides page selections on the Edit Defaults/Personalize pages. If the Page parameter is specified, any Edit Defaults/Personalize page selections are ignored.

Part VII

Appendixes

Part VII contains the following appendixes:

- [Appendix A, "Oracle Portal Seeded Objects"](#)
- [Appendix B, "Page Group Object Privileges"](#)
- [Appendix C, "Formation of URLs in Oracle Portal"](#)
- [Appendix D, "Object Naming Rules in Oracle Portal"](#)
- [Appendix E, "Substitution Tags for HTML and Unstructured UI Templates"](#)
- [Appendix F, "Customizing the Style of Design-Time Dialogs"](#)

Oracle Portal Seeded Objects

This appendix lists the objects (for example, item types and portlets) that Oracle Portal provides to help get you started with creating your portal. It contains the following main sections:

- [Section A.1, "Built-in Page Groups"](#)
- [Section A.2, "Base Attributes"](#)
- [Section A.3, "Base Page Types"](#)
- [Section A.4, "Base Item Types"](#)
- [Section A.5, "Built-in Portlets"](#)

A.1 Built-in Page Groups

During installation, Oracle Portal creates some page groups that it needs to accomplish certain tasks. For example, the Portlet Repository, which contains all the portlets from local and remote providers that can be added to pages, is simply a page group. You cannot delete these default page groups. For information about creating your own page groups, see [Section 4.1, "Creating a Page Group"](#).

[Table A-1](#) lists the built-in page groups and explains how they are used:

Table A-1 *Built-in Page Groups*

Page Group	Purpose
Portal Design-Time Pages	Contains all the pages used by Oracle Portal, including the Portal Builder page, search pages, and Navigator pages.
Portlet Repository	Contains all the providers and associated portlets registered with the current instance of Oracle Portal.
Shared Objects	Contains users' personal pages and all the objects that are shared across page groups (for example, the General category).

A.2 Base Attributes

The attributes described in this section are included with Oracle Portal:

- [Section A.2.1, "Base Content Attributes"](#)
- [Section A.2.2, "Base Display Attributes"](#)
- [Section A.2.3, "Base Search Result Display Attributes"](#)
- [Section A.2.4, "Base Searchable Attributes"](#)

For information about creating your own attributes, see [Section 5.2.1, "Working with Attributes"](#).

A.2.1 Base Content Attributes

[Table A–2](#) lists the base attributes that can be used to store information about an item or page. For information about how to add these attributes to page and item types, see [Section 5.2.3.2, "Editing a Page Type"](#) and [Section 5.2.2.2, "Editing an Item Type"](#).

Table A–2 Base Content Attributes

Attribute:	Contains:
Author	<p>The name of the author of the item.</p> <p>When you add an Author attribute to a custom item type, you can use the tag #USER# as the default attribute value. This displays the current user's name. Note that you cannot use the #USER# tag with custom page types.</p>
Category	The name of the category to which the item or page belongs.
Character Set	<p>The character set used for the item if it is other than that used for the database.</p> <p>This attribute is available only for file- and URL-type items. It is available for use with Base File- and Base URL- base item types. It comes with a list of values (<code>wwv_system.charset_values</code>). It is especially useful for facilitating searches in portals that commonly use multibyte character sets. This is because, for searches to run correctly, content must be converted into the database character set so that it may be indexed. This conversion can occur only when the content's character set is known.</p> <p>For more detail, see <i>Maximizing AUTO_FILTER Performance in the Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>
Description	A short text description of the item or page.
Display Name	The display name of the item or page.
Display Option	<p>Information about how the item or portlet is displayed:</p> <ul style="list-style-type: none"> ■ Item Displayed Directly In Page Area ■ Link That Displays Item In Full Browser Window ■ Link That Displays Item In New Browser Window <p>The option Item Displayed Directly In Page Area applies to file-type items with a MIME type of text/html or text/plain, and PL/SQL, text, and URL item types.</p> <p>The Display Option attribute can be added to any custom item type except the ones based on Base Item Link, Base Portlet Instance, and Base None.</p>
Display Parameter Form	Information determining whether a portlet's parameter form should display.
Enable Item Check-Out	Information about whether or not the item can be checked out and checked in. This provides document control, allowing groups of users to edit items and not overwrite each other's work. Users cannot edit items that are checked out by another user.
Expiration Period	Information about how long an item should be displayed on a page.

Table A–2 (Cont.) Base Content Attributes

Attribute:	Contains:
Image	The image associated with the item or page. If no image is associated, nothing is displayed.
Image Alignment	Information about where the item image should appear in the page. See Table 13–1, "Item Image Alignment Options" for descriptions and examples of image alignment options.
Item Type Icon	<p>The icon and Alt text that represent the item type.</p> <p>Values are provided for the following MIME types: doc, exe, gif, html, htm, jpg, mpeg, pdf, ppt, rtf, txt, wav, xls, zip. For other item types, this attribute displays the values entered for the item types' Image and Display Name attributes. When no image is provided, this attribute displays the built-in basetype icon.</p>
Keywords	Keywords that describe the content or purpose of the item or page. When a user performs a search, the user's search criteria is compared to the keywords to find a match.
Link That Displays Item In New Browser Window	The link associated with an item that, when clicked, displays the item in a second browser window, leaving the first browser window, from which the link was clicked, open.
MIME Type	<p>The MIME type of file- and URL-type items.</p> <p>By default, the MIME type of file- and URL-type items is determined by your browser.</p> <p>Use this attribute to ensure that the correct MIME type is assigned to items in your portal. A misidentified MIME type can cause file download problems and unnecessary filtering (during the indexing process). Filtering content unnecessarily can impact the speed and efficiency of portal searches. For more detail, see <i>Maximizing AUTO_FILTER Performance</i> in the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>
Name	<p>An internal name for the item. If this is not explicitly set, it is defaulted to the item's file name (for file-based items, such as files, images, and Zip files), Display Name, or globally unique ID (GUID).</p> <p>When the Name is explicitly set, it is used (in lieu of the File Name, Display Name, or GUID) in the formation of path-based URLs.</p> <p>Notes:</p> <p>A default value is not required; however, if you plan to specify a default value for the Name attribute, do not use a constant value, such as <i>Your name here</i>. Two or more items on the same page cannot have a common name; consequently, providing a static default value for the Name field results in an error when at least two users accept the default. Instead, consider creating a function that returns a unique value and supplying that as the default.</p> <p>All files uploaded in support of an item retain the same file name across all versions and translations of that item. When a new document file with a different file name from the other versions is uploaded (for example, for a new version of the item), then all files for all versions and translations of that same attribute (for example, the file name attribute) are renamed to match the new file name. This is not only true for documents, it is also true for images, Zip files, or any other file type that is uploaded in support of an item.</p>

Table A–2 (Cont.) Base Content Attributes

Attribute:	Contains:
Oracle Reports Components	The Oracle Reports component to associate with the object.
Perspectives	The names of the perspectives associated with the item or page.
PL/SQL Execute Options	<p>PL/SQL execute options secure the PL/SQL code so that it is executed or parsed by a selected database schema. Use this attribute to explicitly select the database schema that executes the PL/SQL item: the Public schema or a specified database schema. The Public schema is the default.</p> <p>Use this attribute for item types that are based on the PL/SQL base item type.</p>
Portal Template	<p>The Portal Template for items to be used in lieu of the template that was assigned at the page level. This attribute is available for custom item types that are based on one of the following item types: text items, PL/SQL items, URL items, and all file items of the type text/html or text/plain.</p> <p>This attribute displays on the Edit Item page under the following circumstances:</p> <ul style="list-style-type: none"> ■ A Portal Template for items is defined for the page group or the Shared Objects page group. ■ The option Allow items on this page to use a different Portal Template is selected for the page on which the item is placed (Page Properties/Items tab). <p>Notes:</p> <p>When you create custom item types, the Portal Template attribute sometimes appears to allow its placement on the Add Item wizard. In fact, this attribute can be displayed only in the Edit Item wizard, and only for the item types mentioned in the first paragraph of this description.</p> <p>When property inheritance rules (set at the page group level) are set to copy property settings from the page, rather than from the page group, all sub-pages of a page where you apply an item template also inherit the parent page's item template setting. Subsequent changes to the template setting cascade to the sub-pages under the page on which you change the setting. The option Allow items on this page to use a different Portal Template is exempted from this behavior. When changes to item template settings on the parent page cascade to sub-pages, any change to the Allow items on this page to use a different Portal Template setting do not also cascade.</p>
Publish Date	The date (in the format, DD-MON-YYYY HH12:MI PM) when the item is published on the page, that is, when the item is visible to users in View mode
Rollover Image	<p>The second image associated with the item or page. This image is displayed whenever a user moves the mouse cursor over the original image.</p> <p>Rollover images work only on item types that are displayed as links. For example, they can be used successfully with URL item types, and file-type items that are displayed as links. Rollover images do not display with items that are not displayed as links, such as images, file- and text-type items displayed in place, and so on.</p>

Table A–2 (Cont.) Base Content Attributes

Attribute:	Contains:
Version Number	<p>A number indicating the version of the currently displayed item.</p> <p>If you plan to specify a default value for the Version Number attribute, do not use a constant value, such as 2. Because an item cannot have, for example, two versions named '2' on the same page, providing a static default value for the Version Number field will result in an error. Instead, consider creating a function that returns a unique value and supplying that as the default.</p> <p>See also, Section 14.12.3, "Using Your Own Version Numbering Scheme".</p>
Versions	<p>The Versions icon. Users can click this icon to view other versions of the item.</p> <p>Note: This attribute displays only for items that have multiple versions.</p>

A.2.2 Base Display Attributes

[Table A–3](#) lists the base attributes that can be used to display information about an item or portlet. For information about how to display these attributes on a page, see [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#).

Table A–3 Base Display Attributes

Attribute:	Displays:
<Blank Line>	Inserts a blank line between attributes as specified, unless the subsequent attribute has no value. In this case, the Blank Line attribute is ignored to avoid unnecessary white space. See also, Hard Blank Line .
<Hard Blank Line>	Inserts a blank line between attributes as specified regardless of whether any subsequent attributes have values. See also, Blank Line .
<Hard Space>	Inserts a blank space between attributes as specified regardless of whether any subsequent attributes have values. See also, Space .
<Space>	Inserts a blank space between attributes as specified unless the subsequent attribute has no value. In this case, the Space attribute is ignored to avoid unnecessary white space. See also, Hard Space .
Associated Functions	Links to functions associated with the item if the item is of a custom type that includes function calls.
Author	<p>The name of the author of the item.</p> <p>When you add an Author attribute to a custom item type, you can use the tag <code>#USER#</code> as the default attribute value. This displays the current user's name. Note that you cannot use the <code>#USER#</code> tag with custom page types.</p>
Category	The name of the category to which the item or page belongs.

Table A-3 (Cont.) Base Display Attributes

Attribute:	Displays:
Character Set	<p>The character set used for the item if it is other than that used for the database.</p> <p>This attribute is available only for file- and URL-type items. It is available for use with Base File- and Base URL- base item types. It comes with a list of values (<code>wwv_system.charset_values</code>). It is especially useful for facilitating searches in portals that commonly use multibyte character sets. This is because, for searches to run correctly, content must be converted into the database character set so that it may be indexed. This conversion can occur only when the content's character set is known.</p> <p>For more detail, see <i>Maximizing AUTO_FILTER Performance</i> in the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>
Create Date	The date when the item or portlet was added to the page.
Creator	<p>The user name of the user who added the item or portlet to the page.</p> <p>When you add a Creator attribute to a custom item type, you can use the tag <code>#USER#</code> as the default attribute value. This displays the current user's name.</p>
Date Updated	The date when the item or portlet was last updated.
Description	The short text description of the item or page.
Display Name	The display name of the item or page. See also the entries under <i>Link</i> .
Document Size	<p>The size of the uploaded file.</p> <p>Note: This attribute applies only to File and Simple File items, or items of a type based on the Simple File item type.</p>
Expire Date	The date (in the format, DD-MON-YYYY HH12:MI PM) when the item is due to expire.
Gist	<p>The Gist icon. Users can click this icon to display an overview of the item created by Oracle Text.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple Files items, or items of a type based on the Simple File item.</p>
Help URL	<p>The Help icon next to the portlet icon. Users can click this icon to display help for the portlet.</p> <p>Note: This attribute is appropriate only for Portlet Repository pages, and displays only if the portlet developer specified a help URL for the portlet.</p>
Image	The image associated with the item or page. If the item does not have an associated image, nothing is displayed. See also image-related entries under <i>Link</i> .
Image URL	<p>The image icon. Users can click this icon to display a preview of the portlet.</p> <p>Note: This attribute is appropriate only for Portlet Repository pages, and displays only if the portlet developer specified a preview image URL for the portlet.</p>

Table A-3 (Cont.) Base Display Attributes

Attribute:	Displays:
Item Content	<p>The content of the item. This attribute is meant for use with items displayed in place, that is, items whose Display Option is set to Item Displayed Directly In Page Area. It enables you to arrange the display order of the item's content in relation to the other attributes selected for display. For example, placing the Item Content attribute after the Description attribute in the region's list of displayed attributes causes the Description to display ahead of the item's content.</p> <p>In the absence of an Item Content attribute, the item's content displays after all the other specified attributes.</p> <p>Notes:</p> <p>This attribute displays only for Text, Simple Text, and Simple PL/SQL items, or items of a type based on the Simple Text or Simple PL/SQL item types, as well as File-type items with the MIME type text/plain or text/html.</p> <p>The value of the Display Option attribute overrides this attribute setting. Items that display as links (that is, items marked for display in a full browser window or in new browser window) are not affected by the presence or absence of the Item Content attribute in the region.</p>
Item Type Icon	<p>The icon and Alt text that represent the item type.</p> <p>Values are provided for the following MIME types: doc, exe, gif, html, htm, jpg, mpeg, pdf, ppt, rtf, txt, wav, xls, zip. For other item types, this attribute displays the values entered for the item types' Image and Display Name attributes. When no image is provided, this attribute displays the built-in basetype icon.</p>
Keywords	<p>Keywords that describe the content or purpose of the item or page. When a user performs a search, the user's search criteria is compared to the keywords to find a match.</p>
Last Updated By	<p>The user name of the user who last updated the item or portlet.</p>
Link -Display Name	<p>The display name of the item or portlet as a link pointing to the item or portlet content. This attribute uses the object's path-based URL.</p> <p>Note: The display name does not link when the Displayed Directly In Page Area display option is selected for the item or portlet.</p>
Link - Display Name (durable)	<p>The display name of the item or portlet as a link pointing to the item or portlet content.</p> <p>This attribute differs from the <i>Display Name Link</i> attribute in that it uses the durable URL of the item rather than the path-based URL.</p> <p>Note: The display name does not link if the Displayed Directly In Page Area display option is selected for the item or portlet.</p>
Link - Image	<p>The image associated with the item as a link pointing to the item content. If the item does not have an associated image, nothing is displayed. This attribute uses the object's path-based URL.</p> <p>Note: This image does not link if the Item Displayed Directly In Page Area display options is selected for the item.</p>

Table A-3 (Cont.) Base Display Attributes

Attribute:	Displays:
Link - Image (durable)	<p>The image associated with the item as a link pointing to the item content. If the item does not have an associated image, nothing is displayed. This attribute uses the object's durable URL.</p> <p>Note: This image will not be a link if the Item Displayed Directly In Page Area display options is selected for the item.</p>
Link -Image and Display Name	<p>The image and display name of the item or portlet as links pointing to the item or portlet content. If the item has both a display name and an image, these will appear next to each other. If the item does not have an associated image, only the display name appears. This attribute uses the object's path-based URL.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ The display name and image will not be links if the Display Directly In Page Area display option is selected for the item or portlet. ■ Portlets cannot have associated images, so for portlets only the display name is displayed. ■ When a page link item is selected to display in a region with this attribute selected, and the user has provided an image but no display name for the item, after an upgrade this attribute is displayed as the title of the target page along with the original uploaded image. If this is not the desired effect, select the attribute <i>Link - Image OR Display Name</i> for the affected region. This results in just the image being displayed.
Link - Image and Display Name (durable)	<p>The image and display name of the item or portlet as links pointing to the item or portlet content. If the item has both a display name and an image, these will appear next to each other. If the item does not have an associated image, only the display name will appear. This attribute uses the object's durable URL.</p> <p>Notes:</p> <p>The display name and image do not link if the Displayed Directly In Page Area display option is selected for the item or portlet.</p> <p>Portlets cannot have associated images, so for portlets, only the display name is displayed.</p>
Link - Image or Display Name	<p>The image associated with the item as a link pointing to the item content. If the item does not have an associated image, the display name is displayed instead. This attribute uses the object's path-based URL.</p> <p>Note: The image or display name do not link if the Item Displayed Directly In Page Area display option is selected for the item.</p>
Link - Image or Display Name (durable)	<p>The image associated with the item as a link pointing to the item content. If the item does not have an associated image, the display name is displayed instead. This attribute uses the object's durable URL.</p> <p>Note: The image or display name will not be links if the Item Displayed Directly In Page Area display option is selected for the item.</p>

Table A-3 (Cont.) Base Display Attributes

Attribute:	Displays:
MIME Type	<p>The MIME type of file- and URL-type items.</p> <p>The conditions that determine the display text include:</p> <ul style="list-style-type: none"> ■ For items associated with a file of a recognized MIME type, this attribute displays the text that identifies the MIME type, for example, <code>Adobe Portable Document Format</code>. The recognized MIME types are: doc, exe, gif, html, htm, jpg, peg, pdf, ppt, rtf, txt, wav, xls, zip. ■ For other items, this attribute displays the value entered for the item type's Display Name attribute. <p>When the page group is displayed in a non default language, the text is translated automatically when a translation is available in the language. For example:</p> <ul style="list-style-type: none"> ■ Translations for recognized MIME types and built-in item types are available. ■ Translation for a custom item type is available when a translation is provided for the item type's Display Name attribute.
New Item Indicator	<p>The New icon. Users can click this icon to display a list of all the new content in the page group.</p> <p>Note: An item or portlet is considered new for the number of days specified in the page group Icon Display Period setting. See Section 5.5.4, "Displaying the New and Updated Icons". The display period applies to both the New and Recently Updated icons. You cannot set a different display period for the individual icons. This means that, from time to time, an item or portlet may show a New and a Recently Updated icon simultaneously.</p>
Perspectives	<p>The names of the perspectives associated with the item or page.</p>
Portlet Content	<p>The portlet itself if the Item Displayed Directly In Page Area display options is selected.</p>
Portlet Id	<p>The ID of the portlet.</p> <p>Note: This attribute is appropriate only to portlets.</p>
Property Sheet	<p>The Property Sheet icon. Users can click this icon to view the properties of an item or portlet.</p>
Provider Id	<p>The ID of the provider.</p> <p>Note: This attributes is appropriate only for portlets.</p>
Provider Name	<p>The name of the provider.</p> <p>Note: This attribute is appropriate only for portlets.</p>
Publish Date	<p>The date (in the format, DD-MON-YYYY HH12:MI PM) when the item is published on the page, that is, when the item is visible to users in View mode.</p>

Table A-3 (Cont.) Base Display Attributes

Attribute:	Displays:
Rollover Image	<p>The second image associated with the item or page. This image is displayed whenever a user moves the mouse cursor over the original image on a navigation bar or tab.</p> <p>Rollover images work only on item types that are displayed as links. For example, they can be used successfully with URL item types, and file-type items that are displayed as links. Rollover images will not display with items that are not displayed as links, such as images, file- and text-type items displayed in place, and so on. This is also a content attribute.</p>
Subscribe	<p>The Subscribe or Unsubscribe icon. Users can click the Subscribe icon to subscribe to an item and be notified, through the Notification portlet, when it is updated. Users can click the Unsubscribe icon to unsubscribe from an item to which they had previously subscribed.</p> <p>Note: The Subscribe icon displays only if approvals and notifications are enabled for the page group.</p>
Themes	<p>The Themes icon. Users can click this icon to display the nouns and verbs appearing most often within an item.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>
Translations	<p>A list of the languages in which the item or portlet is available.</p>
Updated Item Indicator	<p>The Recently Updated icon. Users can click this icon to display a list of all recently updated content in the page group.</p> <p>Note: An item or portlet is consider recently updated for the number of days specified in the page group Icon Display Period setting. See Section 5.5.4, "Displaying the New and Updated Icons". The display period applies to both the New and Recently Updated icons. You cannot set a different display period for the individual icons. This means that, from time to time, an item or portlet may show a New and a Recently Updated icon simultaneously.</p>
Version Number	<p>A number indicating the version of the currently displayed item.</p> <p>If you plan to specify a default value for the Version Number attribute, do not use a constant value, such as 2. Because an item cannot have, for example, two versions named '2' on the same page, providing a static default value for the Version Number field will result in an error. Instead, consider creating a function that returns a unique value and supplying that as the default.</p> <p>See also, Section 14.12.3, "Using Your Own Version Numbering Scheme".</p>
Versions	<p>The Versions icon. Users can click this icon to view other versions of the item.</p> <p>Note: This attribute displays only for items that have multiple versions.</p>
View As HTML	<p>The View As HTML icon. Users can click this icon to view an HTML version of an item.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple Files items, or items of a type based on the Simple File item type.</p>

Table A–3 (Cont.) Base Display Attributes

Attribute:	Displays:
View As HTML With Highlight	<p>The View AS HTML With Highlight icon. Users can click this icon to view search results content in HTML with the search criteria highlighted.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type. Additionally, this attribute display only on search results pages.</p>

A.2.3 Base Search Result Display Attributes

Table A–4 lists the base attributes that can be used to display information with search results. For information about how to display these attributes on a page, see Section 16.3.4.3, "Customizing Search Results".

Table A–4 Search Result Display Attributes

Attribute:	Displays:
<Blank Line>	Inserts a blank line between search result attributes as specified, unless the subsequent attribute has no value. In this case, the Blank Line attribute is ignored to avoid unnecessary white space. See also, Hard Blank Line.
<Hard Blank Line>	Inserts a blank line between search result attributes as specified regardless of whether any subsequent attributes have values. See also, Blank Line.
<Hard Space>	Inserts a blank space between search result attributes as specified regardless of whether any subsequent attributes have values. See also, Space.
<Space>	Inserts a blank space between search result attributes as specified unless the subsequent attribute has no value. In this case, the Space attribute is ignored to avoid unnecessary white space. See also, Hard Space.
Associated Functions	Links to functions associated with the item if the item is of a custom type that includes function calls. See Section 16.3.4.4, "Using Custom Item Types to Customize Search Results".
Author	<p>The name of the author of the item.</p> <p>When you add an Author attribute to a custom item type, you can use the tag #USER# as the default attribute value. This displays the current user's name. Note that you cannot use the #USER# tag with custom page types.</p>
Category	The name of the category to which the item or page belongs.
Character Set	<p>The character set used for the item if it is other than that used for the database.</p> <p>This attribute is available only for file- and URL-type items. It is available for use with Base File- and Base URL- base item types. It comes with a list of values (<code>wwv_system.charset_values</code>). It is especially useful for facilitating searches in portals that commonly use multibyte character sets. This is because, for searches to run correctly, content must be converted into the database character set so that it may be indexed. This conversion can occur only when the content's character set is known.</p> <p>For more detail, see <i>Maximizing AUTO_FILTER Performance in the Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>

Table A-4 (Cont.) Search Result Display Attributes

Attribute:	Displays:
Create Date	The date when the item or portlet was added to the page.
Creator	The user name of the user who added the item or portlet to the page.
Date Updated	The date when the item or portlet was last updated.
Description	The short text description of the item or page.
Display Name	The display name of the item or page. See also the entries under <i>Link</i> .
Document Size	The size of the uploaded file. Note: This attribute applies only to File and Simple File items, or items of a type based on the Simple File item type.
Expire Date	The date (in the format, DD-MON-YYYY HH12:MI PM) when the item is due to expire.
Gist	The Gist icon. Users can click this icon to display an overview of the item created by Oracle Text. Note: This attribute displays only if Oracle Text is enabled and only for File and Simple Files items, or items of a type based on the Simple File item.
Help URL	The Help icon next to the portlet icon. Users can click this icon to display help for the portlet. Note: This attribute is appropriate only for Portlet Repository pages, and displays only if the portlet developer specified a help URL for the portlet.
Image	The image associated with the item or page. If the item does not have an associated image, nothing is displayed. See also image-related entries under <i>Link</i> .
Image URL	The image icon. Users can click this icon to display a preview of the portlet. Note: This attribute is appropriate only for Portlet Repository pages, and displays only if the portlet developer specified a preview image URL for the portlet.
Item Type Icon	The icon and Alt text that represent the item type. Values are provided for the following MIME types: doc, exe, gif, html, htm, jpg, mpeg, pdf, ppt, rtf, txt, wav, xls, zip. For other item types, this attribute displays the values entered for the item types' Image and Display Name attributes. When no image is provided, this attribute displays the built-in basetype icon.
Keywords	Keywords that describe the content or purpose of the item or page. When a user performs a search, the user's search criteria is compared to the keywords to find a match.
Last Updated By	The user name of the user who last updated the item or portlet.
Link -Display Name	The display name of the item or portlet as a link pointing to the item or portlet content. This attribute uses the object's path-based URL. Note: The display name does not link when the Displayed Directly In Page Area display option is selected for the item or portlet.

Table A–4 (Cont.) Search Result Display Attributes

Attribute:	Displays:
Link -Image and Display Name	<p>The image and display name of the item or portlet as links pointing to the item or portlet content. If the item has both a display name and an image, these will appear next to each other. If the item does not have an associated image, only the display name appears. This attribute uses the object's path-based URL.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ The display name and image will not be links if the Display Directly In Page Area display option is selected for the item or portlet. ■ Portlets cannot have associated images, so for portlets only the display name is displayed. ■ When a page link item is selected to display in a region with this attribute selected, and the user has provided an image but no display name for the item, after an upgrade this attribute is displayed as the title of the target page along with the original uploaded image. If this is not the desired effect, select the attribute <i>Link - Image OR Display Name</i> for the affected region. This results in just the image being displayed.
Link - Image or Display Name	<p>The image associated with the item as a link pointing to the item content. If the item does not have an associated image, the display name is displayed instead. This attribute uses the object's path-based URL.</p> <p>Note: The image or display name do not link if the Item Displayed Directly In Page Area display option is selected for the item.</p>
MIME Type	<p>The MIME type of file- and URL-type items.</p> <p>The conditions that determine the display text include:</p> <ul style="list-style-type: none"> ■ For items associated with a file of a recognized MIME type, this attribute displays the text that identifies the MIME type, for example, <i>Adobe Portable Document Format</i>. The recognized MIME types are: doc, exe, gif, html, htm, jpg, peg, pdf, ppt, rtf, txt, wav, xls, zip. ■ For other items, this attribute displays the value entered for the item type's Display Name attribute. <p>When the page group is displayed in a non default language, the text is translated automatically when a translation is available in the language. For example:</p> <ul style="list-style-type: none"> ■ Translations for recognized MIME types and built-in item types are available. ■ Translation for a custom item type is available when a translation is provided for the item type's Display Name attribute.

Table A–4 (Cont.) Search Result Display Attributes

Attribute:	Displays:
New Item Indicator	<p>The New icon. Users can click this icon to display a list of all the new content in the page group.</p> <p>Note: An item or portlet is considered new for the number of days specified in the page group Icon Display Period setting. See Section 5.5.4, "Displaying the New and Updated Icons". The display period applies to both the New and Recently Updated icons. You cannot set a different display period for the individual icons. This means that, from time to time, an item or portlet may show a New and a Recently Updated icon simultaneously.</p>
Page	The name of the page associated with the search result.
Page Group	The name of the page group associated with the search result.
Perspectives	The names of the perspectives associated with the item or page.
Property Sheet	The Property Sheet icon. Users can click this icon to view the properties of an item or portlet.
Publish Date	The date (in the format, DD-MON-YYYY HH12:MI PM) when the item is published on the page, that is, when the item is visible to users in View mode.
Score	The Oracle Text relevancy score, rating how each result matches the search words.
Subscribe	<p>The Subscribe or Unsubscribe icon. Users can click the Subscribe icon to subscribe to an item and be notified, through the Notification portlet, when it is updated. Users can click the Unsubscribe icon to unsubscribe from an item to which they had previously subscribed.</p> <p>Note: The Subscribe icon displays only if approvals and notifications are enabled for the page group.</p>
Themes	<p>The Themes icon. Users can click this icon to display the nouns and verbs appearing most often within an item.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>
Translations	A list of the languages in which the item or portlet is available.
Updated Item Indicator	<p>The Recently Updated icon. Users can click this icon to display a list of all recently updated content in the page group.</p> <p>Note: An item or portlet is consider recently updated for the number of days specified in the page group Icon Display Period setting. See Section 5.5.4, "Displaying the New and Updated Icons". The display period applies to both the New and Recently Updated icons. You cannot set a different display period for the individual icons. This means that, from time to time, an item or portlet may show a New and a Recently Updated icon simultaneously.</p>
Version Number	A number indicating the version of the currently displayed item.
Versions	<p>The Versions icon. Users can click this icon to view other versions of the item.</p> <p>Note: This attribute displays only for items that have multiple versions.</p>

Table A-4 (Cont.) Search Result Display Attributes

Attribute:	Displays:
View As HTML	<p>The View As HTML icon. Users can click this icon to view an HTML version of an item.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple Files items, or items of a type based on the Simple File item type.</p>
View As HTML With Highlight	<p>The View AS HTML With Highlight icon. Users can click this icon to view search result content in HTML with the search criteria highlighted.</p> <p>Note: This attribute displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type. Additionally, this attribute display only on search results pages.</p>

A.2.4 Base Searchable Attributes

Table A-5 lists the attributes of items, pages, categories, and perspectives that are searchable. See also [Section 2.2.1, "Searching For Content"](#).

Some of the attributes are searched when the user enters a search term, and some attributes are only searchable if a user chooses to filter the search results by the attribute. For details see [Figure A-1, "Searchable Attributes - Oracle Text Enabled"](#) and [Figure A-2, "Searchable Attributes - Oracle Text Disabled"](#).

Note: When Oracle Text is enabled in your portal the content of items are searched too. This means that your search is extended to documents/files uploaded to the portal, and the Web pages that URLs (in URL attributes) point to.

Table A-5 Searchable Attributes

Attribute:	Displays:
Author	<p>The name of the author of the item.</p> <p>Enter #USER# to search for the current user's name.</p>
Base Item Type	The seeded item type on which an item is based.
Category	<p>The name of the category to which an item or page belongs.</p> <p>When searching for categories, this attribute is ignored.</p>
Character Set	<p>The character set used for an item.</p> <p>This attribute is available only for file- and URL-type items. It is available for use with Base File- and Base URL- base item types. It comes with a list of values (<code>wwv_system.charset_values</code>). It is especially useful for facilitating searches in portals that commonly use multibyte character sets. This is because, for searches to run correctly, content must be converted into the database character set so that it may be indexed. This conversion can occur only when the content's character set is known. For more detail, see <i>Maximizing AUTO_FILTER Performance</i> in the <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p> <p>Note: To search for files/URLs items by Character Set, the item type of the files/URLs must include the Character Set attribute.</p>

Table A-5 (Cont.) Searchable Attributes

Attribute:	Displays:
Create Date	<p>The date when an item or portlet was added to a page.</p> <p>Enter #TODAY# to search for items created today. Additionally, you can specify #TODAY#+n or #TODAY#-n, where n is an integer. For example, #TODAY#+7.</p>
Creator	<p>The user name of the user who added an item or portlet to the page.</p> <p>Enter #USER# to search for the current user's name.</p>
Date Updated	<p>The date when an item or portlet was last updated.</p> <p>Enter #TODAY# to search for items updated today. Additionally, you can specify #TODAY#+n or #TODAY#-n, where n is an integer. For example, #TODAY#+7.</p>
Description	The short text description of an item, page, category, or perspective.
Display Name	The display name of an item, page, category, or perspective. See also the entries under <i>Link</i> .
Expire Date	<p>The date (in the format, DD-MON-YYYY HH12:MI PM) when an item is due to expire.</p> <p>Enter #TODAY# to search for items expiring today. Additionally, you can specify #TODAY#+n or #TODAY#-n, where n is an integer. For example, #TODAY#+7.</p>
File Name	<p>The file name of file-based items, such as files, images, and Zip files.</p> <p>The File Name attribute is not searchable if Oracle Text is disabled.</p> <p>Notes: All files uploaded in support of an item retain the same file name across all versions and translations of that item. When a new document file with a different file name from the other versions is uploaded (for example, for a new version of the item), then all files for all versions and translations of that same attribute (for example, the file name attribute) are renamed to match the new file name. This is not only true for documents, it is also true for images, Zip files, or any other file type that is uploaded in support of an item.</p>
Item Type	The item type.
Keywords	Keywords that describe the content or purpose of an item or page. When a user performs a search, the user's search criteria is compared to the keywords to find a match.
Last Updated By	<p>The user name of the user who last updated an item or portlet.</p> <p>Enter #USER# to search for the current user's name</p>
MIME Type	<p>The MIME type of file- and URL-type items.</p> <p>Note: To search for files/URL items by MIME type, the item type of the files/URLs must include the MIME type attribute.</p> <p>This attribute ensures the correct MIME type is assigned to items in your portal. A misidentified MIME type can cause file download problems and unnecessary filtering (during the indexing process). Filtering content unnecessarily can impact the speed and efficiency of portal searches. For more detail, see <i>Maximizing AUTO_FILTER Performance in the Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i>.</p>

Table A-5 (Cont.) Searchable Attributes

Attribute:	Displays:
Name	The internal name for an item or page. If this is not explicitly set, this attribute defaults to the item's file name (for file-based items, such as files, images, and Zip files), Display Name, or globally unique ID (GUID).
Perspectives	The names of the perspectives associated with an item or page. When searching for perspectives, this attribute is ignored.
Publish Date	The date (in the format, DD-MON-YYYY HH12:MI PM) when an item is published on the page, that is, when the item is visible to users in View mode. Enter #TODAY# to search for items published today. Additionally, you can specify #TODAY#+n or #TODAY#-n, where n is an integer. For example, #TODAY#+7.
URL	The URL defined using a URL item. Note: The URL attribute is not searchable if Oracle Text is disabled.
Version Number	A number indicating the version of an item.

Figure A-1 Searchable Attributes - Oracle Text Enabled

- ✓ - attribute is searched when the user enters a search term
- ✓ - attribute may be used to filter search results only

Searchable Attributes (Oracle Text Enabled)	Item	Page	Perspective	Category
Author	✓			
Base Item Type	✓			
Category	✓	✓		
Character Set	✓			
Create Date	✓			
Creator	✓			
Date Updated	✓			
Description	✓	✓	✓	✓
Display Name	✓	✓	✓	✓
Expire Date	✓			
File Name	✓			
Item Type	✓			
Keywords	✓	✓		
Last Updated By	✓			
MIME type	✓			
Name	✓	✓		
Perspectives	✓	✓		
Publish Date	✓			
URL	✓			
Version Number	✓			

Figure A-2 Searchable Attributes - Oracle Text Disabled

- ✓ - attribute is searched when the user enters a search term
- ✓ - attribute may be used to filter search results only

Searchable Attributes (Oracle Text Disabled)	Item	Page	Perspective	Category
Author	✓			
Base Item Type	✓			
Category	✓	✓		
Character Set	✓			
Create Date	✓			
Creator	✓			
Date Updated	✓			
Description	✓	✓	✓	✓
Display Name	✓	✓	✓	✓
Expire Date	✓			
File Name				
Item Type	✓			
Keywords	✓	✓		
Last Updated By	✓			
MIME Type	✓			
Name	✓	✓		
Perspectives	✓	✓		
Publish Date	✓			
URL				
Version Number	✓			

A.3 Base Page Types

Table A-6 lists the page types that are included in Oracle Portal by default. For information about creating your own page types, see Section 5.2.3, "Working with Page Types".

Table A-6 Base Page Types

Page Type	Description
Standard	Displays items and portlets. This page type is included by default in newly created page groups.

Table A-6 (Cont.) Base Page Types

Page Type	Description
URL	Displays the contents of a particular URL. This page type is included by default in newly created page groups.
PL/SQL	Displays the results of executing PL/SQL code.
JSP	Displays the results of executing a JavaServer Page (JSP). Note: JSP access must be enabled for the page group for this page type to be available.
Mobile	Displays items and portlets in a hierarchical tree structure, suitable for viewing on a mobile device. Note: Mobile support and mobile page design must be enabled for the portal for this page type to be available.

A.4 Base Item Types

[Table A-7](#) and [Table A-8](#) list the base item types that are included in Oracle Portal by default. [Table A-9](#) lists the built-in custom item types. For information about extending these item types to meet your requirements, see [Section 5.2.2.2, "Editing an Item Type"](#). For information about how to create your own item types, see [Section 5.2.2, "Working With Item Types"](#).

Table A-7 Base Content Item Types

Item Type	Description
Base File	Uploads a file and stores it in the page group.
Base Image Map	Uploads an image and allows contributors to identify areas within the image that users can click to go to different URLs.
Base Image	Uploads an image and stores it in the page group.
Base PL/SQL	Executes PL/SQL code and displays the results.
Base Page Link	Links to another page in the page group.
Base Text	Displays text (up to 32KB).
Base URL	Links to another Web page, Web site, or document.
Base Item Link	Links to another content item (file, text, URL, image, and the like) within a page group and displays the content of that item or a link to the content, depending on the source's display option.
Base Item Placeholder	Identifies where the content from items that use a Portal Template for items will display in relation to the rest of the template content. Select default content for the Item Placeholder; choose from file items of type text/html or text/plain, text items, PL/SQL items, and URL items.

Table A–8 Base Navigation Item Types

Item Type	Description
Portal Smart Link	<p>Adds a Smart Link (and associated image) to the page. A Smart Link is a link that users can click to access areas of the portal quickly, such as Account Information, Advanced Search, Contact Information, Help, and Home.</p> <p>This item type is included by default in newly created page groups.</p>
Login/Logout Link	<p>Adds a links or icon to the page that users can click to log in or log out of the portal.</p> <p>This item type is included by default in newly created page groups.</p>
Basic Search Box	<p>Adds a basic search box (and associated image) to the page in which users can enter search criteria. The contributor can specify whether users of the search box can search all page groups or only a specific page group.</p>
List of Objects	<p>Adds a list of objects (pages, categories, and perspectives) that the contributor specifies to the page. The contributor can choose to display this list as a drop down list or as links (with or without associated images).</p>
Portal Smart Text	<p>Adds Smart Text, such as the current date, current users, or current page to the page.</p>
Object Map Link	<p>Adds a map of objects available in the portal.</p>
Page Path	<p>Adds the page path to the page. The contributor can choose the number of levels for the path, and the character that separates the path levels.</p>
Page Function	<p>Adds a page function to the page. If there are no page functions associated with the current page, this item type is not available to the content contributor.</p>

Table A–9 Built-in Custom Item Types

Item Type	Description
Simple File	<p>Based on the Base File item type, this item type contains very few attributes.</p>
Simple Image Map	<p>Based on the Base Image Map item type, this item type contains very few attributes.</p>
Simple Image	<p>Based on the Base Image item type, this item type contains very few attributes.</p>
Simple Item Link	<p>Based on the Base Item Link item type, this item type contains very few attributes.</p>
Simple PL/SQL	<p>Based on the Base PL/SQL item type, this item type contains very few attributes.</p>
Simple Page Link	<p>Based on the Base Page Link item type, this item type contains very few attributes.</p>
Simple Text	<p>Based on the Base Text item type, this item type contains very few attributes.</p>
Simple URL	<p>Based on the Base URL item type, this item type contains very few attributes.</p>

Table A–9 (Cont.) Built-in Custom Item Types

Item Type	Description
File	Similar to the Simple File item type, except with more attributes. This item type is included by default in newly created page groups.
Image	Similar to the Simple Image Map item type, except with more attributes. This item type is included by default in newly created page groups.
Item Placeholder	Identifies where item content is displayed (on a Portal Template for items) in relation to the rest of the template content. You cannot extend the Item Placeholder item type.
PL/SQL	Similar to the Simple PL/SQL item type, except with more attributes.
Page Link	Similar to the Simple Page Link item type, except with more attributes. This item type is included by default in newly created page groups.
Text	Similar to the Simple Text item type, except with more attributes. This item type is included by default in newly created page groups.
URL	Similar to the Simple URL item type, except with more attributes. This item type is included by default in newly created page groups.
Zip File	Uploads a zip file, which users can then unzip within the page group as a method of uploading many files in a single operation. This item type is included by default in newly created page groups.

A.5 Built-in Portlets

Oracle Portal provides many portlets to get you started with building your portal. The following table lists the portlets that Oracle Portal provides by default and where they can be found in the Portlet Repository.

Note: If the portal administrator has reorganized the Portlet Repository, these built-in portlets may be in different locations within the Portlet Repository.

You can find many more portlets in the Oracle PartnerNetwork's Solutions Catalog. The Catalog includes portlets and services offered by our Oracle Portal Partners, and you can see the full list of partners and get a brief description of their offerings at <http://solutions.oracle.com>.

Portlet Builders

Table A–10 Built-in Portlets in the Portlet Builders Page of the Portlet Repository

Portlet	Description
OmniPortlet	Display spreadsheet, XML, and Web Service data as tabular, chart, news, bullet, and form layouts. Interact with page parameters and events. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Web Clipping Portlet	Generic portlet for re-purposing existing dynamic Web content, by clipping parts from them as portlet content in the building of dynamic pages aggregating various sources of information from the Web. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Simple Parameter Form	Enable users to submit parameter values that are passed to a page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
HTML Portlet	Create or edit HTML content. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Report Portlet	Add a report directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Form Portlet	Add a form directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .

Table A–11 Built-in Portlets in the Survey Builder Page of the Portlet Repository

Portlet	Description
Survey Builder	Create, edit, or copy questions, score text (essay) responses, purge responses, or delete a survey, test, or poll. See Section A.5.6, "Working with the Survey Portlets"
Survey Form	Display a survey, test, or poll. See Section A.5.6, "Working with the Survey Portlets"
Survey Chart	Display the cumulative results of a survey, test, or poll in a bar chart format. Drill down for individual participant results. See Section A.5.6, "Working with the Survey Portlets"
Survey Report	Display the cumulative results of a survey, test, or poll in a report format. Drill down for individual participant results. See Section A.5.6, "Working with the Survey Portlets"

Table A–12 Built-in Portlets in the Additional Portlet Builders Page of the Portlet Repository

Portlet	Description
Calendar Portlet	Add a calendar directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Chart Portlet	Add a chart directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Data Component Portlet	Add a data component directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Dynamic Page Portlet	Add a dynamic page directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
Hierarchy Portlet	Add a hierarchy directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .

Table A–12 (Cont.) Built-in Portlets in the Additional Portlet Builders Page of the Portlet Repository

Portlet	Description
Menu Portlet	Add a menu directly to the page. See <i>Oracle Fusion Middleware Developer's Guide for Oracle Portal</i> .
MobileXML Portlet	Create or edit Oracle Application Server Wireless XML content. See Section 9.6, "Adding MobileXML to Oracle Portal Pages" .

Portal Content Tools

Table A–13 Built-in Portlets in the Portal Content Tools Page of the Portlet Repository

Portlet	Description
Set Language	Set the language for the portal. See Section A.5.5, "Working with the Set Language Portlet" .
Favorites	List links to your favorite Web pages. See Section A.5.1, "Working with the Favorites Portlet" .
Advanced Search	Perform an advanced search within page groups. See Section 16.2, "Working with Basic and Advanced Search Portlets" .
Basic Search	Perform a basic search within page groups. See Section 16.2, "Working with Basic and Advanced Search Portlets" .
Custom Search	Create a custom search that exposes attributes, search criteria and parameters, and so on. See Section 16.3, "Working with the Custom Search Portlet" .
My Approval Status	List the status of items awaiting approval. See Section 2.7, "Getting Your Content Approved" .
My Notifications	List notifications about approvals, expirations, and subscriptions. See Section 1.2.1, "Keeping Up with Changes" .
Page	Display the content of a portal page. See Section 8.5.2, "Displaying a Page Through the Page Portlet" .
My Page	Display your personal page. See Section 1.4, "Personalizing Your Portal" . Note: This portlet is available only if you have a personal page, or you are the portal administrator or the Shared Objects page group administrator.
Pending Approvals Monitor	List items awaiting approval. See Section 5.4.4, "Monitoring Pending Approvals" .
Saved Searches	List your saved searches. See Section 2.2.3, "Saving and Reusing Searches" .
User Managed Pages	List the pages on which you have the <i>Manage</i> privilege. See Section 7.2, "Listing the Pages You Manage" .

Published Portal Content

The Published Portal Content page of the Portlet Repository contains pages and navigation pages published as portlets. By default, the portlets are organized by page group.

Shared Portlets

The Shared Instances page of the Portlet Repository is where a portlet appears if it has been shared.

Administration Portlets

Table A–14 Built-in Portlets in the SSO/OID Page of the Portlet Repository

Portlet	Description
External Applications	List links to your external applications. See Section A.5.3, "Working with the External Applications Portlet" .
Login	Log on directly from a page. See Section A.5.4, "Working with the Login Portlet" .
User	Create or edit users. See <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
Group	Create or edit groups of users. See <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
People Search	Search for a user.
Portal Group Profile	Edit a group's portal preferences and global privileges. See <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
Portal User Profile	Edit a user's portal preferences and global privileges. See <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .

Table A–15 Built-in Portlets in the Database Page of the Portlet Repository

Portlet	Description
Database Navigator	Navigate database objects. Note: The Navigator portlets are specifically designed for use on the Navigator pages. If you add them to pages outside of the Navigator, you may get unexpected behavior. Therefore, we recommend that you avoid placing the Navigator portlets on pages outside of the Navigator.
Schemas	Create, edit, or navigate to a database schema.
Roles	Create or edit a database role.
Database Information	List statistics about database settings and parameters.
Database Memory Consumption Transactions and Locks	List statistics about database memory consumption, transactions, and locks.
Database Storage	List statistics about database storage.
Batch Results	List status and results for background applications.

Table A–16 Built-in Portlets in the Portal Page of the Portlet Repository

Portlet	Description
Mobile log by portlet	List the headers and content of the mobile-enabled portlets, and the results of an Oracle Application Server Wireless XML syntax check on the content of those portlets. Note: This portlet is intended for use by mobile portlet developers to test their portlets. See <i>Configuring Mobile Support in OracleAS Portal</i> in <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .

Table A–16 (Cont.) Built-in Portlets in the Portal Page of the Portlet Repository

Portlet	Description
Most recent mobile log entry	List the headers and content of the most recently accessed mobile-enabled portlet, and the results of an Oracle Application Server Wireless XML syntax check on the content of that portlet. Note: This portlet is intended for use by mobile portlet developers to test their portlets. See <i>Configuring Mobile Support in OracleAS Portal</i> in <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
Recent Objects	List the objects recently modified by you. See Section A.5.2, "Working with the Recent Objects Portlet" .
Remote Providers	Create, edit, or refresh provider information.
Portlet Repository	Display the Portlet Repository, refresh all the portlets in the Portlet Repository, or view the refresh log.
Services	Edit portal settings
Find	Search page groups, Portal database providers, and database objects.
Providers Navigator	Navigate providers, including Portal database providers and their portlets. Note: The Navigator portlets are specifically designed for use on the Navigator pages. If you add them to pages outside of the Navigator, you may get unexpected behavior. Therefore, we recommend that you avoid placing the Navigator portlets on pages outside of the Navigator.
Page Group Navigator	Navigate page groups. Note: The Navigator portlets are specifically designed for use on the Navigator pages. If you add them to pages outside of the Navigator, you may get unexpected behavior. Therefore, we recommend that you avoid placing the Navigator portlets on pages outside of the Navigator.
Database Providers	Create, edit, or navigate to a Portal database provider.
Remote Provider Group	Create, edit, or refresh provider groups.
Export/Import Transport Set	Edit transport sets for exporting, import transport sets, and view information about existing transport sets. See <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
Clear Cache	Clear the cache.
Error Message Portlet	List diagnostic information for error messages. See <i>Specifying an Error Message Page</i> in <i>Oracle Fusion Middleware Administrator's Guide for Oracle Portal</i> .
Page Groups	Create, edit, or navigate to a page group; create or edit a page; create a style or template.

Table A–17 Built-in Portlets in the Oracle Reports Security Page of the Portlet Repository

Portlet	Description
Oracle Reports Security	Access Reports Security portlets.
Reports Server Access	Create or edit access to Oracle Reports servers.
Reports Definition File Access	Create or edit access to Oracle Reports definition files.

Table A-17 (Cont.) Built-in Portlets in the Oracle Reports Security Page of the Portlet Repository

Portlet	Description
Reports Printer Access	Create or edit access to Oracle Reports printers.
Reports Calendar Access	Create or edit availability calendars for Reports servers, printers, and report definition files.

Portlet Staging Area

The Portlet Staging Area page of the Portlet Repository is where the portlets appear when a provider is first registered with the portal. The portal administrator can edit the Portlet Repository to move these portlets to a more suitable location.

A.5.1 Working with the Favorites Portlet

The Favorites portlet allows users to quickly access their most often used and favorite Web pages.

You can add, edit, delete, and move favorites in the Favorites portlet. You can also personalize the portlet to control how the favorites and favorite groups are displayed. Additionally, you can also create default favorites for all users of the portlet.

The Favorites Smart Link offers an alternative way of adding your personal favorites. If your page designer includes a Favorites Smart Link on the page you can add the current page to the Favorites portlet, directly from the page itself.

A favorites group is a collection of favorites and groups that are usually logically related. For example, you might create a favorites group called Newspapers that contains links to The New York Times, The Washington Post, and so on. The favorite group might also contain other favorite groups called Michigan Publications and Libertarian Press, which contain favorites to URLs related to those themes.

Favorite groups are displayed in the Favorites portlet only if you select the Hierarchical display method on the Edit Favorites Portlet Settings page. Favorite groups are designated by the **Favorite Group** icon, as shown in [Figure A-3](#):

Figure A-3 The Favorites Portlet in Hierarchy Display Mode

If you select the Flat List display method, favorites are shown without the group to which they belong:

Figure A–4 The Favorites Portlet in Flat List Display Mode

A.5.1.1 Personalizing the Favorites Portlet

To add links to your favorite Web pages, you personalize the Favorites portlet. You can also personalize the Favorites portlet to:

- Change the name of the portlet (for example, from Favorites to Sarah’s Sites).
- Choose to display the favorites by group or as a flat list.
- Choose to display the default favorites as well as your own favorites.
- Choose to display the favorites in a new browser window.
- Control how many favorites are displayed in the portlet.

Note: When you personalize the Favorites portlet, the changes that you make are visible only to yourself.

Personalize the Favorites Portlet Settings

To personalize the Favorites portlet settings:

1. In the Favorites portlet header, click the **Personalize** link.
2. In the **Display Name** field, enter a descriptive display name for the Favorites portlet. The display name is displayed in the Favorites portlet header.
3. In the **Structure** list, choose **Hierarchy** to display your favorite groups, as well as the favorites within them. You can nest your groups to two levels within the portlet, not including the root level. Choose **Flat List** to remove group names from the portlet and display all the favorites in a list.
4. Select the **Display Default Favorites** check box to include the default favorites in the portlet, as well as your own favorites.
5. Select the **Open Favorites In New Browser Window** check box to open the favorites in a new browser window.
6. In the **Display** radio group, select **Show All** to show all your favorites in the portlet, or select **Limit List To** and enter a number from 0 to 99 to control how many favorites are displayed.
7. Click **OK**.

Click **Reset to Defaults** to restore the Favorites portlet settings to the default settings. This does not delete your favorites from the Favorites portlet, it simply resets the portlet settings, such as the Display Name and Structure.

Adding a Favorite

To add a favorite:

1. In the Favorites portlet header, click the **Personalize** link.
2. Click the **Add Or Edit Favorites** link.
3. To add a favorite at the top level, click the **Create Favorite** link next to Actions. To add a favorite to a group, click the **Create Favorite** link next to the group.
4. In the **Display Name** field, enter a descriptive display name for the favorite. The display name is displayed as a link in the Favorites portlet.
5. In the **URL** field, enter the URL of the Web page that you are adding as a favorite.
6. In the **Description** field, enter a description for the favorite. The description is visible only when you are editing the favorite.
7. Click **Create**.

You may be able to add a page to your list of personal favorites directly from the page itself if the page designer has included a Favorites Smart Link on the page, see [Section 13.6.6, "Adding a Portal Smart Link Item"](#).

Creating a Favorite Group

To create a favorite group:

1. In the Favorites portlet header, click the **Personalize** link.
2. Click the **Add Or Edit Favorites** link.
3. To create a favorite group at the top level, click the **Create Group** link next to Actions. To create a favorite group under another group, click the **Create Group** link next to the group.
4. In the **Display Name** field, enter a descriptive display name for the favorite group. The display name is displayed in the Favorites portlet.
5. In the **Description** field, enter a description for the favorite group. The description is visible only when you are editing the favorite group.
6. Click **Create**.

Editing a Favorite or Favorite Group

To edit a favorite or favorite group:

1. In the Favorites portlet header, click the **Personalize** link.
2. Click the **Add Or Edit Favorites** link.
3. Click the **Edit** link next to the favorite or favorite group that you want to edit.
4. Edit the favorite or favorite group settings as required.
5. Click **OK**.

Moving a Favorite or Favorite Group

To move a favorite or favorite group:

1. In the Favorites portlet header, click the **Personalize** link.
2. Click the **Add Or Edit Favorites** link.
3. Click the **Move** link next to the favorite or favorite group that you want to move.
4. Click the **Move To** link next to the group under which you want to move the favorite or favorite group.

Deleting a Favorite or Favorite Group

To delete a favorite or favorite group:

1. In the Favorites portlet header, click the **Personalize** link.
2. Click the **Add Or Edit Favorites** link.
3. Click the **Delete** link next to the favorite or favorite group that you want to delete.
4. If you are deleting a favorite group, click **Yes** in the confirmation page. If you are deleting a favorite, the favorite is deleted immediately. You are not prompted for confirmation.

Note: When you delete a favorite group, all the favorites and favorite groups belonging to the deleted favorite group are also deleted.

A.5.1.2 Adding Default Favorites and Favorite Groups to the Favorites Portlet

In addition to the favorites that users create themselves, page designer can create default favorites that display to all users of the Favorites portlet. Both the user added favorites and the default favorites display in the Favorites portlet.

Adding a Default Favorite

To add a default favorite:

1. Edit the page that contains the Favorites portlet.
2. Click the **Edit Defaults** icon next to the Favorites portlet.
3. Click the **Add Or Edit Default Favorites** link.
4. To add a default favorite at the top level, click the **Create Favorite** link next to Actions. To add a default favorite to a group, click the **Create Favorite** link next to the group.
5. In the **Display Name** field, enter a descriptive display name for the default favorite. The display name is displayed as a link in the Favorites portlet.
6. In the **URL** field, enter the URL of the Web page that you are adding as the default favorite.
7. In the **Description** field, enter a description for the default favorite. The description is visible only when you are editing the default favorite.
8. Click **Create**.

Creating a Default Favorite Group

To create a default favorite group:

1. Edit the page that contains the Favorites portlet.
2. Click the **Edit Defaults** icon next to the Favorites portlet.
3. Click the **Add Or Edit Default Favorites** link.
4. To create a default favorite group at the top level, click the **Create Group** link next to Actions. To create a default favorite group under another group, click the **Create Group** link next to the group.
5. In the **Display Name** field, enter a descriptive display name for the default favorite group. The display name is displayed in the Favorites portlet.

6. In the **Description** field, enter a description for the default favorite group. The description is visible only when you are editing the default favorite group.
7. Click **Create**.

A.5.2 Working with the Recent Objects Portlet

The Recent Objects portlet allows users to quickly access the objects they most recently created or edited within Oracle Portal.

A.5.2.1 Personalize the Recent Objects Portlet

You can personalize the Recent Objects portlet as follows:

- Change the name of the portlet (for example, from Recent Objects to Most Used).
- Control how many objects are displayed in the portlet.
- Choose which object attributes to display, such as the last modified date, object type, object image, a numbered list and so on.

To personalize the Recent Objects portlet:

1. In the Recent Objects portlet header, click the **Personalize** link.
2. In the **Banner** field, enter a descriptive display name for the Recent Objects portlet. The display name is displayed in the Recent Objects portlet header.
3. In the **Display** radio group, select **Show All** to show up to 50 objects in the portlet, or select **Limit List To** and enter a number from 0 to 50 to explicitly control how many objects are displayed.
4. Select the appropriate **Display** check boxes to control what appears next to the objects in the portlet. Select:
 - **Object Type** to display the type of object, such as Page or Master-Detail Form.
 - **Object Image** to display a visual representation of the object.
 - **Numbered List** to place a number in sequential order to the left of each object.
 - **Last Modified** to display the time when the object was last updated.
5. Click **Clear my list of recent objects** to remove all entries from the Recent Objects portlet, leaving it empty until you next create or edit an object.
6. Click **OK**.

Click **Reset** to restore the Recent Objects portlet settings to the default settings.

A.5.3 Working with the External Applications Portlet

The External Applications portlet allows users to access applications outside of Oracle Portal that require login. For links and applications that do not require a login, a Favorites link is a better choice.

A.5.3.1 Personalizing the External Applications Portlet

You can personalize the External Applications portlet to complete one or more of the following tasks:

- Change the name of the portlet.
- Choose to display or hide certain applications.

- Supply your user name and password for applications so that OracleAS Single Sign-On Server can automatically log you in.
- Change the name of the application as it appears in the portlet.

To personalize the External Applications portlet:

1. In the External Applications portlet header, click the **Personalize** link.
2. In the **Banner** field, enter a descriptive display name for the External Applications portlet. The display name is displayed in the External Applications portlet header.
3. Select the appropriate **Display** check boxes to control which applications display in the portlet. If a check box is not selected, the associated application does not appear in the portlet.

The portal administrator determines which applications are included in this list.

4. If you want Oracle Portal to automatically log you into the application whenever you launch it from the External Applications portlet, click the **Edit** icon to enter your user name and password for the application.
 - a. In the **User Name/ID** field, enter your user name for this application.
 - b. In the **Password** field, enter your password for this application.

If you ever change your password for this application, be sure to update your password on this page as well.
 - c. Select the **Remember My Login Information For This Application** check box.
 - d. Click **OK**.
5. To launch the application itself, click the link in the **Application Name** column. If necessary, fill in your user name and password, then click **Login**.
6. To change the name of the application as it appears in the portlet, enter the new name in the **Preferred Name** field.
7. Click **OK**.

Click **Reset to Defaults** to restore the External Applications portlet settings to the default settings. Clicking **Reset to Defaults** returns you to your page.

A.5.4 Working with the Login Portlet

The Login portlet allows users to log in to a portal directly from a page. If the self-registration feature is enabled, the Login portlet can also include a link to allow users to register with the portal and create their own user accounts.

A.5.4.1 Setting Up the Login Portlet

You can control the following aspects of the Login portlet:

- The name of the portlet.
- The pages to display on successful login or logout.
- Whether to display the Login portlet when users are logged on.
- Whether users can register themselves with the portal.

To set up the Login portlet:

1. Edit the page that contains the Login portlet.
2. Click the **Edit Defaults** icon next to the Login portlet.

3. If you want the Login portlet to display a header, click **Display Portlet Header** and optionally, use the **Banner** field to enter a descriptive display name.

If you just want to display a Login/Logout link, do not select **Display Portlet Header**.

4. In the **On Success URL** field, enter the URL of the page to display when users successfully log on.

Leave this field blank if you want to display the same page that contains the Login portlet. If you want the user to see their default home page after they login, you can enter `<portal schema name>.home` in this field. For example, `portal.home`.

5. In the **On Cancel URL** field, enter the URL of the page to display when users log out.

Leave this field blank if you want to display the same page that contains the Login portlet.

6. Select the **Hide Portlet** check box if you do not want to display the Login portlet when users are logged on.

If you do not select this check box, the Login portlet is displayed containing a Logout link.

7. Select the **Enable Self-Registration** check box if you want to allow users to register with the portal and create their own user accounts.

- a. In the **Self-Registration Link Text** field, enter the text for the self-registration link. This is the link that users click to register with the portal and create their own user accounts. The default is Create New Account.

- b. In the **Self-Registration URL** field, enter the URL of the page to display when users click the self-registration link.

If you do not have your own custom self-registration page, leave this field blank to use the default self-registration page provided by Oracle Portal.

8. Click OK.

A.5.5 Working with the Set Language Portlet

The Set Language portlet allows users to set the language to use for their portal sessions. If the territory feature is enabled, users can also set their geographical location (territory) so that localization settings such as date, currency, and decimal formats are displayed correctly. If the territory feature is not enabled, the territory is defaulted to the most common for the selected language. Users in different territories may notice some of the localization settings are different from what they might expect.

A.5.5.1 Setting Up the Set Language Portlet

You can control the following aspects of the Set Language portlet:

- The name of the portlet.
- How the languages are displayed in the portlet.
- Whether users can also set their territory.

To set up the Set Language portlet:

1. Edit the page that contains the Set Language portlet.
2. Click the **Edit Defaults** icon next to the Set Language portlet.

3. In the **Banner** field, enter a descriptive display name for the Set Language portlet. The display name is displayed in the Set Language portlet header.
4. Select the **Display Languages Vertically** check box if you want the list of languages to display in a single vertical list. If you do not select this check box, the list of languages displays horizontally in several rows.
5. Select the **Enable Territory Selection** check box if you want to enable users to specify their geographical location (territory) for the portal session.
6. Click **OK**.

A.5.6 Working with the Survey Portlets

The Survey Builder distinguishes between surveys, polls, and tests through different options available to each type. For example, when you create a test, you're given the options of specifying the correct answer for each question and assigning a value to each correct answer. Neither polls or surveys come with these options, but they do allow you to specify that participants can select multiple answers for a given question. For tests, you can choose only one answer for each question. Hand scoring is also available for essay questions on a test. Non-essay questions are scored automatically. Scoring is not used with surveys or polls.

Surveys and polls are similar, though surveys are more complex. When you create a survey (or a test), you can set up sections of questions, and, depending on a participant's answer to a particular question, automatically redirect the survey to a different section. This option isn't available with polls.

For example, imagine a survey that seeks to understand how employees feel about a relaxed dress code. The survey is divided into three sections: main, relaxed, and formal. The main section has only one question: What type of dress code would you prefer? This question has two answers: relaxed or formal. Everyone answers this question. If participants answer relaxed, they're automatically sent to the relaxed section, which seeks to clarify what they mean by relaxed. These participants end up answering the questions in the main and relaxed sections. If participants answer formal, they are automatically sent to the formal section, which seeks to clarify what they mean by formal. These participants end up answering the questions in the main and formal sections.

Additionally, with surveys you have the option of gathering identity information about participants. Polls don't offer this option.

For all types of surveys (including surveys, polls, and tests), you can choose the answer format for each question. Answers may be selected using radio buttons, pull-down lists, and check boxes, as well as text boxes for essay-type responses.

A.5.6.1 Creating a Survey

Planning out your survey in advance will allow you, for example, to pre-build all your sections before you populate them with questions. This way, sections will be available for setting up triggered redirections as you build your survey. It isn't required that you do this, however. If you wish, you can edit your survey after all sections and all questions are in place, adding redirections to different sections at this time.

To create a survey:

1. In the Survey Builder portlet, click the **Create Survey** link.
2. In the **Name** field, enter a name for your survey. This name will display in your survey's portlet header.

3. In the **Page Group** list, choose the page group to use to store text responses.
4. In the **Type** radio group, make sure that **Survey** is selected.
5. In the Participant Identity section, select the check boxes next to the information you will use to identify survey participants.

When users take this survey, whatever information is already available in their Portal User Profile will populate automatically. Otherwise, users will be prompted to supply this information. Any information they supply may also be written to their Portal User Profile if the user requests it. The default value is Anonymous (no check boxes are selected).

6. Select the **Multiple Replies** check box if you plan to allow participants to take the survey more than once.

Selecting this option means that every time users log in, their view of the survey refreshes and their original answers do not appear. If you do not allow multiple replies, until users click the Finish button to complete the survey, every time they log in their view of the survey retains all of their answers. This option allows users to go back and modify their answers as well as to leave the survey—even to log off—and continue taking it later.

7. Select the **Place Survey** check box if you want to automatically place the survey on a specific page.
 - a. From the **Page Group** list, choose the page group that owns the page on which you want to place the survey.
 - b. In the popup window, click **Return Object** next to the page on which you want to place the survey.

You can leave the **Place Survey** check box cleared and the page unspecified until you are completely satisfied with the survey. You can also add the survey to any page later by adding and editing the Survey Form portlet.

8. In the End of Survey Options section, choose what will happen once the user completes the survey and clicks Finish. Choose:
 - **Show Chart of Responses** to display a bar chart of participant responses.
 - **Show Report of Responses** to display a report of participant responses.
 - **Allow Editing of Responses** to return to the first survey question, with the user's answers intact, allowing the user to revise any original responses.
 - **Show Nothing** to close the Survey Form portlet (that is, the portlet containing the survey will no longer display on the user's page).
9. In the **Welcome message** field, enter a message that will precede the first question in the survey.
10. Select the **First page shows only welcome message** to include the welcome message on its own page. The first question in the survey will be displayed on the next page.
11. In the **Closing comments** field, enter a message that will follow the last question in the survey.
12. Click **Next**.
13. From the **Section** list, choose the section in which to include the question. To create a new section, choose **-- new --**. If you are creating a new section:
 - a. In the **Section** field, enter a name for the section.

your information gathering requirements are simple and do not require the identification of your respondents.

To create a poll:

1. In the Survey Builder portlet, click the **Create Poll** link.
2. In the **Name** field, enter a name for your poll. This name will display in your poll's portlet header.
3. In the **Page Group** list, choose the page group to use to store text responses.
4. In the **Type** radio group, make sure that **Poll** is selected.
5. Select the **Multiple Replies** check box if you plan to allow participants to take the poll more than once.

Selecting this option means that every time users log in, their view of the poll refreshes and their original answers do not appear. If you do not allow multiple replies, until users click the Finish button to complete the poll, every time they log in their view of the poll retains all of their answers. This option allows users to go back and modify their answers as well as to leave the poll—even to log off—and continue taking it later.

6. Select the **Place Poll** check box if you want to automatically place the poll on a specific page.
 - a. From the **Page Group** list, choose the page group that owns the page on which you want to place the poll.
 - b. In the popup window, click **Return Object** next to the page on which you want to place the poll.

You can leave the **Place Poll** check box cleared and the page unspecified until you are completely satisfied with the poll. You can also add the poll to any page later by adding and editing the Survey Form portlet.

7. In the Finish Button Text field, enter the text that you want to appear on the poll's Finish button.
8. In the End of Poll Options section, choose what will happen once the user completes the poll and clicks Finish. Choose:
 - **Show Chart of Responses** to display a bar chart of participant responses.
 - **Show Report of Responses** to display a report of participant responses.
 - **Allow Editing of Responses** to return to the first poll question, with the user's answers intact, allowing the user to revise any original responses.
 - **Show Nothing** to close the Survey Form portlet (that is, the portlet containing the poll will no longer display on the user's page).
9. In the **Welcome message** field, enter a message that will precede the first question in the poll.
10. Click **Next**.
11. In the **Question** field, enter a question. Each question can contain up to 500 characters.
12. From the **Display Style** list, choose the format for the response to the question. Choose from **Check Box**, **Radio Buttons**, **Pull Down List**, and **Text**. Check boxes and radio buttons will display to the left of each response. Users will click one or more of these to respond. Pull down lists will populate with whatever answers you enter in the Answer Choices field. Users will choose one or more items from

this list. Text boxes are suitable for essay questions. Users will enter their answers in the text field to respond to this question.

Text responses are stored on a page with the same name as the poll in the page group specified in the step 3 of this task.

13. Select the **Allow Multiple Responses** check box if you want users to be able to select more than one check box or item from the pull down list in response to this question.
14. Select the **Include "Other" choice and "Please Explain" field** check box if you want users to be able to respond with an answer other than those provided for this question.
Responses entered in the Please Explain field are stored on a page with the same name as the poll in the page group specified in step 3 of this task.
15. Select the **Response is optional** check box if you want to allow users to finish the poll without providing an answer to the question.
16. In the **Image** field, enter the path and file name of an image to associate with the question.
17. In the **Answer choices** field, enter the allowable responses for the question. Press Enter after each choice. This field can contain up to 32,000 characters. Do not enter any values in this field if you chose Text as the Display Style for the question.
18. Click **Add another question**.
When you add a question, it is listed on the left hand side of the page. You can click the **Edit** icon next to the question to edit the question later.
19. If you want to add another question, repeat steps 11 through 18. If you have finished entering your questions, click **Next**.
20. If you are happy with your poll, click **Finish**. If you are not, click **Back** to edit your questions.

A.5.6.3 Creating a Test

Use tests to evaluate your participants' level of understanding of a particular subject area, and to assign scoring values to your participants' correct responses. With the Survey Builder, you can create complex tests with multiple sections and automatic redirection based on participant responses, or simple tests comprised of lists of questions and potential answers.

Planning your test in advance will allow you, for example, to prebuild all your sections before you populate them with questions. This way, sections will be available for setting up triggered redirections as you build your test. It isn't required that you do this, however. If you wish, you can edit your test after all sections and all questions are in place, adding redirections to different sections at this time.

To create a test:

1. In the Survey Builder portlet, click the **Create Test** link.
2. In the **Name** field, enter a name for your test. This name will display in your test's portlet header.
3. In the **Page Group** list, choose the page group to use to store text responses.
4. In the **Type** radio group, make sure that **Test** is selected.
5. In the Participant Identity section, select the check boxes next to the information you will use to identify test participants.

When users take this test, whatever information is already available in their Portal User Profile will populate automatically. Otherwise, users will be prompted to supply this information. Any information they supply may also be written to their Portal User Profile if the user requests it. The default value is Anonymous (no check boxes are selected).

6. Select the **Multiple Replies** check box if you plan to allow participants to take the test more than once.

Selecting this option means that every time users log in, their view of the test refreshes and their original answers do not appear. If you do not allow multiple replies, until users click the Finish button to complete the test, every time they log in their view of the test retains all of their answers. This option allows users to go back and modify their answers as well as to leave the test—even to log off—and continue taking it later.

7. Select the **Place Test** check box if you want to automatically place the survey on a specific page.
 - a. From the **Page Group** list, choose the page group that owns the page on which you want to place the test.
 - b. In the popup window, click **Return Object** next to the page on which you want to place the test.

You can leave the **Place Test** check box cleared and the page unspecified until you are completely satisfied with the test. You can also add the test to any page later by adding and editing the Survey Form portlet.

8. In the End of Test Options section, choose what will happen once the user completes the test and clicks Finish. Choose:
 - **Show Chart of Responses** to display a bar chart of participant responses.
 - **Show Report of Responses** to display a report of participant responses.
 - **Allow Editing of Responses** to return to the first test question, with the user's answers intact, allowing the user to revise any original responses.
 - **Show Nothing** to close the Survey Form portlet (that is, the portlet containing the test will no longer display on the user's page).
9. In the **Welcome message** field, enter a message that will precede the first question in the test.
10. Select the **First page shows only welcome message** to include the welcome message on its own page. The first question in the test will be displayed on the next page.
11. In the **Closing comments** field, enter a message that will follow the last question in the test.
12. Click **Next**.
13. From the **Section** list, choose the section in which to include the question. To create a new section:
 - a. From the **Section** list, choose **-- new --**.
 - b. In the **Section** field, enter a name for the section.
 - c. In the **Message** field, enter a message to display at the beginning of the section, before any questions.
 - d. From the **Copy from** list, choose a section from which to copy questions.

- e. Click **Finish**.
14. In the **Question** field, enter a question. Each question can contain up to 500 characters.
15. From the **Display Style** list, choose the format for the response to the question. Choose from **Check Box**, **Radio Buttons**, **Pull Down List**, and **Text**. Check boxes and radio buttons will display to the left of each response. Users will click one or more of these to respond. Pull down lists will populate with whatever answers you enter in the Answer Choices field. Users will choose one or more items from this list. Text boxes are suitable for essay questions. Users will enter their answers in the text field to respond to this question.

Text responses are stored on a page with the same name as the test in the page group specified in the step 3 of this task.
16. Select the **Response is optional** check box if you want to allow users to finish the test without providing an answer to the question.
17. In the **Image** field, enter the path and file name of an image to associate with the question.
18. In the **Answer choices** field, enter the allowable responses for the question. Press Enter after each choice. This field can contain up to 32,000 characters. Do not enter any values in this field if you chose Text as the Display Style for the question.
19. If you want some responses to lead the user to another section of the test, in the Trigger section:
 - a. From the **This answer** list, select the response that will trigger the redirection.
 - b. From the **Triggers section** list, select the section to go to when the user provides the chosen response.
20. From the **Correct Answer** list, choose the correct answer to the question.
21. In the **Scoring Weight** field, assign a score for the correct value. You can enter a score for text answers too. This value will be used as the default score for a correct response when hand scoring is run.
22. Click **Add another question**.

When you add a question, it is listed on the left hand side of the page. You can click the **Edit** icon next to the question to edit the question later.
23. If you want to add another question, repeat steps 13 through 22. If you have finished entering your questions, click **Next**.
24. If you are happy with your test, click **Finish**. If you are not, click **Back** to edit your questions.

A.5.6.4 Adding a Survey, Poll, or Test to a Page

When you create or edit a survey, poll, or test, you can choose to automatically place it on a particular page. Alternatively, you can add the survey, poll, or test to any page yourself.

To add a survey, poll, or test to a page:

1. Edit the page to which you want to add the survey, poll, or text.
2. In the region where you want to add the survey, poll, or test, click the **Add Portlets** icon.

If you do not see the **Add Portlets** icon, the region may be an item region, in which case, you cannot add portlets to this region.

3. Click the link for the **Survey Form** portlet.

By default, the Survey Form portlet is located under the Survey Builder page of the Portlet Repository (which in turn is under the Portlet Builders page). If you cannot find the My Notifications portlet under this page, use the Search field.

4. Click **OK**.
5. Next to the portlet, click the **Edit Defaults** icon.
6. In the **Name** field, enter the name of the survey, poll, or test.
7. In the **Start Date** field, enter the date on which to make the survey, poll, or test available to participants.
8. In the **End Date** field, enter the date on which the survey, poll, or test ends.
9. In the **Questions per page** field, enter the number of questions to appear on each page of the survey, poll, or test. Enter All to display all the questions on a single page.
10. Use the **Font Face**, **Color**, **Size**, **A** (bold), *A* (italic), and A (underscored) settings to determine the appearance of the different types of text in the survey. You can set different font settings for questions, instructions, answers, and identification information. You can also set the background color of the survey, poll, or test itself.
11. Click **OK**.

Page Group Object Privileges

This appendix describes the privileges required to perform page group related tasks. It contains the following sections:

- [Section B.1, "Privileges Required for Page Group Related Tasks"](#)
- [Section B.2, "Page Group Privileges"](#)
- [Section B.3, "Page and Tab Privileges"](#)
- [Section B.4, "Item Privileges"](#)

For more information about how security works in Oracle Portal, including a table that lists and describes global privileges, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

B.1 Privileges Required for Page Group Related Tasks

[Table B-1](#) describes the minimum privileges required for performing various actions on page group objects.

Table B-1 Privileges Required to Perform Page Group Related Tasks

To Perform the Following Task	Minimally, You Need the Following Privilege
View the content of a non-public page	<ul style="list-style-type: none"> ■ The item privilege <i>View</i> on the item (item level security enabled); ■ The tab privilege <i>View</i> on the tab containing the item; ■ The page privilege <i>View</i> on the page; ■ The page group privilege <i>View</i> on the page group; ■ The global privilege <i>View</i> on the object type <i>All Pages</i>
Hide, show, and rearrange any portlet on your own version of a page	<ul style="list-style-type: none"> ■ The page privilege <i>Personalize Portlets (Hide-Show)</i> on the page; or ■ The global privilege <i>Personalize Portlets (Hide-Show)</i> on the object type <i>All Pages</i>
Add a portlet to your own version of a page, and hide, show, rearrange, and delete the portlets that you add to your own version of the page	<ul style="list-style-type: none"> ■ The page privilege <i>Personalize Portlets (Add-Only)</i> on the page; or ■ The global privilege <i>Personalize Portlets (Add-Only)</i> on the object type <i>All Pages</i>
Delete any portlet from your own version of a page or move any portlet to a different region on your own version of the page	<ul style="list-style-type: none"> ■ The page privilege <i>Personalize Portlets (Full)</i> on the page; or ■ The global privilege <i>Personalize Portlets (Full)</i> on the object type <i>All Pages</i>

Table B–1 (Cont.) Privileges Required to Perform Page Group Related Tasks

To Perform the Following Task	Minimally, You Need the Following Privilege
Add items that require approval before they display on the page	<ul style="list-style-type: none"> ■ The page privilege <i>Manage Items With Approval</i> on the page; or ■ The global privilege <i>Manage Items With Approval</i> on the object type <i>All Pages</i> <p>Note: The page privilege <i>Manage Items With Approval</i> is available on a page only when approvals and notifications are enabled for the page's page group. For more information, see Section 5.4.2, "Enabling Approvals and Notifications for a Page Group".</p>
Add content (items, subitems, and portlets) to a page without requiring approval, edit item properties, hide, show, rearrange, and delete items	<ul style="list-style-type: none"> ■ The page privilege <i>Manage Content</i> on the page; or ■ The global privilege <i>Manage Content</i> on the object type <i>All Pages</i>
Apply a different style to your own version of a page	<ul style="list-style-type: none"> ■ The <i>Personalize (Style)</i> privilege on the page; or ■ The global privilege <i>Personalize (Style)</i> on the object type <i>All Pages</i> <p>Note: Users can apply a different style to their own version of a page only if the page group property Allow Privileged Users To Personalize Page Style is enabled. For more information, see Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page".</p>
Apply a different style to a page	<p>When the page group property Allow Privileged Users To Manage Page Style is enabled:</p> <ul style="list-style-type: none"> ■ The page privilege <i>Manage Style</i> on the page; or ■ The global privilege <i>Manage Style</i> on the object type <i>All Pages</i> <p>When the page group property Allow Privileged Users To Manage Page Style is disabled:</p> <ul style="list-style-type: none"> ■ The page group privilege <i>Manage Styles</i> on the page group; ■ The page group privilege <i>Manage All</i> on the page group; or ■ The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i> <p>For more information on the page group properties Allow Privileged Users ..., see Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page".</p>
Create a page	<ul style="list-style-type: none"> ■ The page privilege <i>Manage</i> on the parent page and the global privilege <i>Create</i> on the object type <i>All Pages</i>; or ■ The global privilege <i>Manage</i> on the object type <i>All Pages</i>
Edit page properties, or delete a page	<ul style="list-style-type: none"> ■ The page privilege <i>Manage</i> on the page; or ■ The global privilege <i>Manage</i> on the object type <i>All Pages</i>
Add, delete, or edit a region	<ul style="list-style-type: none"> ■ The page privilege <i>Manage</i> on the page; or ■ The global privilege <i>Manage</i> on the object type <i>All Pages</i>

Table B-1 (Cont.) Privileges Required to Perform Page Group Related Tasks

To Perform the Following Task	Minimally, You Need the Following Privilege
Create, delete, or edit a template	<ul style="list-style-type: none"> ■ The page group privilege <i>Manage Templates</i> on the page group; or ■ The global privilege <i>Manage Templates</i> on the object type <i>All Page Groups</i> <p>Notes:</p> <ul style="list-style-type: none"> ■ A user with this privilege must also have the page group privilege <i>View</i> to view pages in the page group. ■ Users with this privilege can delete a tab on a template only when they also have the privilege to delete any content added to the tab on pages that are based on the template.
Create, delete, or edit an attribute, item type, page type, category, or perspective	<ul style="list-style-type: none"> ■ The page group privilege <i>Manage Classifications</i> on the page group; or ■ The global privilege <i>Manage Classifications</i> on the object type <i>All Page Groups</i> <p>Notes: A user with this privilege must also have the page group privilege <i>View</i> to view pages in the page group.</p>
Create a page group	The global privilege <i>Create</i> on the object type <i>All Page Groups</i>
Edit page group properties, or delete a page group	<ul style="list-style-type: none"> ■ The page group privilege <i>Manage All</i> on the page group; or ■ The global privilege <i>Manage All</i> on the object type <i>All Page Groups</i>

B.2 Page Group Privileges

Table B-2 lists and describes the privilege levels that can be granted on page groups.

Table B-2 Page Group Privileges

A User or Group with the Following Privilege:	Can:
Manage All	<p>Perform any task within the page group.</p> <p>The Manage All privilege includes all other page group privileges: Manage Classifications, Manage Templates, Manage Styles, and View.</p> <p>A user with this privilege is called the <i>page group administrator</i>.</p> <p>Note: If you grant a user <i>Manage All</i> privileges on a page group and that user subsequently creates a new page within the page group, even if you remove the user's privileges, he or she will always be able to access the page through its URL and edit the content and add new content.</p>
Manage Classifications	<p>Create, edit, and delete any category, perspective, attribute, custom item type, and custom page type in the page group.</p> <p>Note:</p> <ul style="list-style-type: none"> ■ A user with this privilege must also have the page group privilege <i>View</i> to view pages in this page group. ■ Users with this privilege cannot delete item or page types they have created if the portal contains items or pages based on the type. Such users must first obtain privileges on the items and pages.

Table B–2 (Cont.) Page Group Privileges

A User or Group with the Following Privilege:	Can:
Manage Templates	<p>Create, edit, and delete any template in the page group.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ A user with this privilege must also have the page group privilege <i>View</i> to view pages in the page group. ■ A user with this privilege can delete a tab on a template only if other users have not placed their own content on the tab on pages that are based on the template or if the user has sufficient content management privileges on the pages that are based on the template.
Manage Styles	<p>Create, edit, and delete any style in the page group, and change the style applied to any page in the page group.</p> <p>A user with this privilege can also view any page in the page group.</p> <p>Note: The Manage Styles privilege does not provide grantees with any personalization privileges on the page groups on which it is granted.</p>
View	<p>View the content of any page in the page group, but cannot add, remove, show, or hide any content within those pages.</p> <p>A user with the privilege can also preview any externally published portlet in the page group.</p>

B.3 Page and Tab Privileges

[Table B–3](#) lists and describes the privilege levels that can be granted on both pages and tabs.

Table B–3 Page and Tab Privileges

Privilege	Description
Manage	<p>A user with the page privilege <i>Manage</i> can perform any operation on the page or tab. The <i>Manage</i> privilege includes all the other page or tab privileges. Such users can add regions to a page and create sub-pages under the page on which they have the privilege. Additionally, they can perform all of the actions listed for the <i>Manage Content</i> privilege, as well as control page or tab access and the page style or the style of the tab's regions (but see Notes).</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ For a user with this privilege to change the page style or the style of the tab's regions, the page group option <i>Allow Privileged Users To Manage Style</i> must be selected at the page group level. Selecting this option enables the user to apply a different style when editing the page or the tab's regions. If this option is not selected at the page group level, only users with the page group privilege <i>Manage All</i> or <i>Manage Styles</i> can apply a different style to the page or the tab's regions. ■ There is a second page group option for controlling page styles called <i>Allow Privileged Users To Personalize Page Style</i>. When this option is selected, users with at least the page privilege <i>Personalize (Style)</i> can apply a different style when personalizing the page. ■ If a page is based on a template, users with the <i>Manage</i> privilege may not be able to control page or tab access and style. There are two template-level options, <i>Enable Pages To Have Different Access</i> and <i>Enable Pages To Use Different Style</i>, that control whether page designers can specify different access and style settings. These template-level options must be selected; otherwise, page or tab access and style settings cannot be changed on pages that use the template, even though users have the <i>Manage</i> privilege. <p>For more information, see Section 4.3.2, "Controlling Who Can Apply a Different Style to a Page" and Section 17.5.2, "Granting Privileges on a Page".</p>
Manage Content	<p>Users with the page or tab privilege <i>Manage Content</i> can add, edit, hide, show, share, and delete, any item, sub-item, portlet, or tab on the page or tab's defined regions.</p> <p>Such users can also personalize pages according to the personalize page privileges and can view the page.</p>
Manage Items With Approval	<p>A user with the page or tab privilege <i>Manage Items with Approval</i> can add or edit items on the page or tab, but the changes are published only after the defined approval process is complete.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ This page privilege is available only when approvals are enabled on the page's page group. If approvals are enabled, but an approval process is not defined, users with this privilege can add, edit, or copy items on the page or tab without approval. In other words, when approvals are enabled but an approval process is not defined, the page privilege <i>Manage Items With Approval</i> becomes equivalent to the page privilege <i>Manage Content</i> with regard to items. ■ This privilege is not available for mobile pages. ■ Users with the page or global privilege <i>Manage Items with Approval</i> can also personalize the pages on which they have the privilege and can view the page. <p>For more information, see Section 5.4, "Setting Up Approvals".</p>

Table B–3 (Cont.) Page and Tab Privileges

Privilege	Description
Manage Style	<p>A user with the page or tab privilege <i>Manage Style</i> can change the style of the page and regions on the page or regions on the tab. The Manage Style privilege includes all of the page personalization privileges and the View privilege on the pages on which it is granted.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ For a user with the <i>Manage Style</i> privilege to change the style of a page or a region on a tab, the page group option <i>Allow Privileged Users To Personalize Page Style</i> must be selected for the page's page group. This option is available on the Main tab of page group properties. ■ If a page is based on a template, users with the <i>Manage Style</i> privilege may not be able to control the style of the page. The template-level option, <i>Enable Pages To Use Different Style</i> must be selected on the template to enable users with the <i>Manage Style</i> privilege to change the style of a page that is based on the template. ■ This privilege is not available for mobile pages.
Personalize Portlets (Full)	<p>A user with the page or tab privilege <i>Personalize Portlets (Full)</i> can alter his own view of the page by changing the style of the page, adding portlets to the page, and deleting, moving, hiding, or showing any portlet on the page.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ For a user with this privilege to change the style of a page or of a region on the tab, the page group option <i>Allow Privileged Users To Personalize Page Style</i> must be selected for the page or tab's page group. Such users can also view any page on which they have the privilege. ■ Changes made under <i>Personalize</i> privileges are visible only to the user who made them. For example, if a user with the <i>Personalize Portlets (Full)</i> privilege deletes a portlet from a page or tab, other users will still see that portlet. Similarly, if a user with the <i>Personalize Portlets (Full)</i> privilege adds a portlet to a page or a tab, only that user will see the portlet.
Personalize Portlets (Add-Only)	<p>A user with the page or tab privilege <i>Personalize Portlets (Add-Only)</i> can alter their view of the page by changing the style of the page, adding portlets to the page, and deleting, hiding, or showing the portlets that they add. Such users can also view any page on which they have the privilege.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ For a user with this privilege to change the style of a page or of a region on a tab, the page group option <i>Allow Privileged Users To Personalize Page Style</i> must be selected on the page or tab's page group. ■ Changes made under the privilege <i>Personalize Portlets (Add-Only)</i> are visible only to the user who made them. For example, if a user with this privilege adds a portlet to a page, only that user will see the portlet.

Table B–3 (Cont.) Page and Tab Privileges

Privilege	Description
Personalize Portlets (Hide-Show)	<p>A user with the privilege <i>Personalize Portlets (Hide-Show)</i> can change the style on their view of the page or of regions on a tab, and hide, show, or rearrange any portlet on their view of the page or regions. Such users can also view any page on which they have the privilege</p> <p>Notes:</p> <ul style="list-style-type: none"> For a user with this privilege to change a style, the page group option <i>Allow Privileged Users To Personalize Page Style</i> must be selected on the page or tab's page group. Changes made under the privilege <i>Personalize Portlets (Hide-Show)</i> are visible only to the user who made them. For example, if a user with this privilege hides a portlet on a page, that portlet is hidden only for that user; other users will still be able to see the portlet.
Personalize (Style)	<p>A user with the page or tab privilege <i>Personalize (Style)</i> can apply a different style to their view of the page or of regions on a tab. Such users can also view any page on which they have the privilege</p> <p>Notes:</p> <ul style="list-style-type: none"> For a user with this privilege to change a style, the page group option <i>Allow Privileged Users To Customize Page Style</i> must be selected on the page or tab's page group. Changes made under the page privilege <i>Personalize (Style)</i> are visible only to the user who made them. For example, if a user with this privilege applies a different style to a page, other users will still see the page with the original style. If a page is based on a template, users with this privilege may not be able to control the style of the page or of the region on the tab. The template level option <i>Enable Pages To Use Different Style</i> must be selected on the template to enable users with the <i>Personalize (Style)</i> privilege to change the style of a page that is based on the template. This privilege is not available for mobile pages.
View	<p>A user with the page or tab privilege <i>View</i> can view the content of the page or tab, but cannot add, remove, show, or hide any of that content.</p>

B.4 Item Privileges

Item level privileges are useful for granting users a higher level of privilege on an item than might be granted to them on the page or tab that contains the item. For example, a user with the page privilege *View* can view a page but cannot affect the page in any other way. Give that user the item privilege *Edit*, and he can enter the page in Edit mode and revise the relevant item. This user cannot affect any other page content, just the item on which he has the higher privilege and any sub-items he may create under that item.

[Table B–4](#) lists and describes the privileges that can be granted on items when item level security is enabled.

Table B-4 *Item Privileges*

Item Privileges	Description
Manage	Users with the item privilege <i>Manage</i> can view, edit, delete, and grant privileges on the item on which they have the privilege. Additionally, they can add sub-items under the item.
Edit	Users with the item privilege <i>Edit</i> can view, edit, and delete the item on which they have the privilege. Additionally, they can add sub-items under the item.
View	A user with the item privilege <i>View</i> can view the item. No other actions are available through this privilege.

Formation of URLs in Oracle Portal

Two types of URL are used for accessing objects in a portal: *path-based* and *durable*. This appendix answers the question, "What URLs can I use to access objects in my portal?" and provides additional information on their use. It includes the following sections:

- [Section C.1, "Path-Based URLs"](#)
- [Section C.2, "Durable URLs"](#)
- [Section C.3, "Additional Notes on Path-Based and Durable URLs"](#)

C.1 Path-Based URLs

A path-based URL is formed by identifying the path taken through the portal to get to a particular object. This uses object names in the URL and thus, if the name of an object within the path is changed, the URL will no longer be valid. Path-based URLs can be formed for these types of objects:

- Pages
- Tabs
- Items
- Portal Templates
- Navigation pages
- Category pages
- Perspective pages

This section parses the format used for path-based URLs and provides examples of how they are formed when targeting portal objects. It includes the following subsections:

- [Section C.1.1, "Forming Path-Based URLs"](#)
- [Section C.1.2, "Examples of Path-Based URLs"](#)

C.1.1 Forming Path-Based URLs

The format of a path-based URL that is used to render an item is:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/  
<page_path>/<item_name>
```

Note: In URLs, page names, object names, "/portal/page/" and GUIDs are case sensitive. All other parts of the URL are not case sensitive.

Where:

- `host` is the machine on which Oracle Portal is installed.
- `port` is the port number used to access Oracle Portal.
- `portal` is a static element of an Oracle Portal URL.
- `dad` is the Database Access Descriptor (DAD) that is used for your Oracle Portal installation. The DAD contains information on how to connect to the database.
- `language` is the language in which you will display the object. Language is an optional path element. For examples of the `lang` parameter in action, see [Section C.3.3, "The Language Parameter in Path-Based and Durable URLs"](#).

Should users request a language for which there is no translation, an error message displays:

```
The language specified in the URL is not currently supported by this Portal.  
(WWC-57383)
```

- `version` is the version of the item. Version is optional and is used only with items. The value is a number or STAGE, DRAFT, or REJECTED. For example:

```
.../ver-2/...  
.../ver-STAGE/...  
.../ver-DRAFT/...  
.../ver-REJECTED/...
```

Note: If the URL specifies a version of an item that does not exist, the current version of the item is displayed, except as noted in the following paragraph.

When the STAGE, DRAFT, or REJECTED version is specified in a path-based URL, the item is rendered according to the following rules:

- **STAGE**—First the pending version of the item is rendered; then, if there is no pending version, the current version of the item is rendered.
- **DRAFT**—First the draft version of the item is rendered; then, if there is no draft version (or it is not available), the pending version of the item is rendered; finally, if there is no pending version, the current version of the item is rendered.
- **REJECTED**—First the rejected version of the item is rendered; then, if there is no rejected version, the current version of the item is rendered.

For a discussion of which users can view items in what state, see [Section 17.9.3, "Item URL Security"](#).

- `page_path` is the path taken to get to the object.
- `item_name` is the name of the item.

C.1.2 Examples of Path-Based URLs

Path-Based URLs for Pages

Path-based URLs for pages take the following format:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>]/<page_path>
```

For example, To access the root page of the page group MyPageGroup:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup
```

To access a top-level page (sample_page) of the page group MyPageGroup:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/sample_page
```

To access a sub-page (page1a) of sample_page:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/
sample_page/page1a
```

To access a category page:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/mycategory
```

To access a perspective page:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/myperspective
```

To access a navigation page:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/mynavpage
```

To access a Portal Template:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/mytemplate
```

Path-Based URLs for Tabs

The format of path-based URLs for tabs is very similar to that used for pages. The difference is that the active tab list is added to the end of the host page URL. The active tab list indicates the hierarchy of tabs. Tabs are divided from their sub-tabs by colons; tab sets are divided from additional tab sets by commas:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>]/
<page_path>/<tab1_name>:<tab1's_sub-tab_name>,<tab2_name>:
<tab2's_sub-tab_name>
```

Note: When the URL targets a tab, the path uses colons to separate a tab from its sub-tab; when the URL traverses a tab to get to an item on a sub-tab, the path uses a slash (/) in lieu of a comma. See "[Path-Based URLs for Items](#)" for an example.

For example to access tab1 on page1:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup/page1/
tab1
```

To access a nested tab (tab1a) on tab1:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup/page1/
tab1:tab1a
```

To render page1a with the tabs Sales:Divisions and Manufacturing:Schedules foremost, that is, as the active tabs (note that these tabs do not exist on the same tab set, that is they do not have a parent/child relationship to each other), use the URL:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/  
sample_page/page1a/Sales:Divisions,Manufacturing:Schedules
```

Path-Based URLs for Items

To access an item, use the following format:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][ver-<version>]/  
<page_path>/<item_name>
```

If the item is placed on a tab:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup/page1/  
tab1/tab1a/myDocument.htm
```

Note: When the URL targets tabs, the path uses a colon (:) to separate a tab from its sub-tab; when the URL traverses a tab to get to an item on a sub-tab, the path uses a slash (/) in lieu of a comma. See ["Path-Based URLs for Tabs"](#) for examples.

If a name was not explicitly specified when the item was created, it is defaulted to be the same as the item's file name (for file-based items) or display name.

For example to access the current English version of myDocument.htm on page1a:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/MyPageGroup/  
page1/page1a/myDocument.htm
```

To access the third English version of myDocument.htm:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/ver-3/MyPageGroup/  
page1/page1a/myDocument.htm
```

To access a draft or pending version of myDocument.htm:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/ver-STAGE/  
MyPageGroup/page1/page1a/myDocument.htm
```

C.2 Durable URLs

A durable URL is formed by using a globally unique identifier (GUID). Because the GUID of an object never changes, the URL will continue to be valid if the object name changes. Durable URLs can be formed for the following types of objects:

- Pages
- Tabs
- Items
- Portal Templates
- Navigation pages

- Category pages
- Perspective pages

This section parses the format used for durable URLs and provides examples of how they are formed when targeting portal objects. It includes the following subsections:

- [Section C.2.1, "Forming Durable URLs"](#)
- [Section C.2.2, "Examples of Durable URLs"](#)

C.2.1 Forming Durable URLs

The format of an item durable URL is:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/<guid>
```

Note: In URLs, page names, object names, "/portal/page/" and GUIDs are case sensitive. All other parts of the URL are not case sensitive.

Where:

- `host` is the machine on which Oracle Portal is installed
- `port` is the port number used to access Oracle Portal.
- `portal` is a static element of an Oracle Portal URL.
- `page` is a static element of an Oracle Portal URL.
- `dad` is the Database Access Descriptor (DAD) used for your Oracle Portal installation. The DAD contains information on how to connect to the database.
- `language` is the language in which you will display the object. Language is an optional path element. For information about the `lang` parameter, see [Section C.1, "Path-Based URLs"](#) and [Section C.3.3, "The Language Parameter in Path-Based and Durable URLs"](#).
- `version` is the version of the item. Version is optional and is used only with items. The value is a number or STAGE, DRAFT, or REJECTED. (see [Section C.1, "Path-Based URLs"](#) for additional information about the `ver` parameter).
- `guid` is the object's globally unique identifier.

Typically, no matter which type of URL format is used to link to an object, when users click the link, the browser address bar displays the path-based URL. Oracle Portal performs an automatic conversion of durable URLs to path-based for display purposes. When users click links based on durable URLs, they see path-based URLs in their browser address bars.

C.2.2 Examples of Durable URLs

Durable URLs for Pages

Durable URLs for pages, and objects that are based on pages, such as category pages, perspective pages, navigation pages, and Portal Templates, take the following format:

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>]/<page_guid>
```

For example:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/  
A47D41ECA23648A9E030007F0100118A
```

Note: Users can view a page's durable URL from the page's property sheet. Click the Page Properties icon next to the page path, which is displayed at the top of the page in all of the Edit mode views.

For backward compatibility, ID-based URLs are supported in the current release of Oracle Portal. Following this release, ID-based URLs that follow the following syntax will be obsolete. The obsolete format follows the syntax:

```
http://<host>:<port>/pls/<DAD>/!<Schema>.wwpob_page.show?_  
pageid=<siteid,pageid>,...
```

For backward compatibility, direct access URL formats are supported in the current release of Oracle Portal. Following this release, direct access URL formats will be obsolete. The obsolete format follows the syntax:

```
http://<host>:<port>/pls/<DAD>/<path_alias>/<page_path>
```

For the current release, direct access URL formats invoke a splash screen that redirects users to the correct target. Avoid using ID-based and direct access URL formats going forward, and consider reformatting legacy uses of these formats.

Durable URLs for Tabs

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>]/<tab_guid>
```

For example:

```
http://mymachine.mycompany.com:5000>/portal/page/mydad/lang-en/  
A47D41ECA23648A9E036147F0100118A
```

For backward compatibility, ID-based URLs are supported in the current release of Oracle Portal. Following this release, ID-based URLs that follow the following syntax will be obsolete:

```
http://<host>:<port>/pls/<DAD>/!<Schema>.wwpob_page.show?_pageid=<siteid,pageid>,  
<tab1_id>:<tab1's_sub-tab_id>,<tabA_id>:<tabA's_sub-tab_id>
```

For backward compatibility, direct access URL formats are supported in the current release of Oracle Portal. Following this release, direct access URL formats will be obsolete. The obsolete format follows the syntax:

```
http://<host>:<port>/pls/<DAD>/<path_alias>/PAGE/<page_path>/  
<tab1_name>
```

For the current release, such URL formats invoke a splash screen that redirects users to the correct target. Avoid using ID-based and direct access URL formats going forward, and consider reformatting legacy uses of these formats.

Note: Only the first tab in direct access URLs are preserved when redirecting to the new URL format. The other tabbed regions on the page default to the first available tab in the region.

Durable URLs for Items

```
http://<host>:<port>/portal/page/<dad>[/lang-<language>][/ver-<version>]/
<item_guid>
```

You can determine an item's GUID by editing the displayed attributes on the region where the item is placed. Display the Property Sheet attribute in the region. Once displayed, click the Property Sheet icon next to the item to view the item's durable URL. For information on displaying region attributes, see [Section 10.2.9, "Changing the Attributes Displayed in a Region"](#).

If the GUID of an item is A47D41ECA23648A9E030007F0100118A, the durable link URL to the English version 2 of the item is:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/lang-en/ver-2/A47D41ECA23648
A9E030007F0100118A
```

For backward compatibility, ID-based, direct-access URLs are supported in the current release of Oracle Portal. Following this release, ID-based, direct-access URLs that follow the following syntax will be obsolete:

```
http://<host>:<port>/pls/<DAD>/<path_alias>/<item_guid>
```

When users click a link in this format, a splash screen displays that redirects users to the path-based URL format.

Additionally, for backward compatibility, path-based URLs for documents are supported in the current release of Oracle Portal. Following this release, path-based URLs that follow the following syntax will be obsolete:

```
http://<host>:<port>/pls/<DAD>/docs/<page_path>/<document_name>.<extension>
```

When users click a link in this format, a splash screen displays that redirects users to the durable URL format. Because there could be a number of documents associated with an item, such as icons or custom attributes, users cannot be redirected to a path-based item URL.

We strongly recommend that users change all legacy bookmarks to point to the new URL format to avoid broken links in the event the legacy format is de-supported.

C.3 Additional Notes on Path-Based and Durable URLs

This section provides additional information about the formation of URLs in Oracle Portal. It contains the following subsections:

- [Section C.3.1, "Additional Notes on the Formation of URLs in Oracle Portal"](#)
- [Section C.3.2, "How Name, Display Name, and File Name Affect a Path-Based URL"](#)
- [Section C.3.3, "The Language Parameter in Path-Based and Durable URLs"](#)

C.3.1 Additional Notes on the Formation of URLs in Oracle Portal

- In URLs, page names, object names, "/portal/page/" and GUIDs are case sensitive. All other parts of the URL are not case sensitive.
- Should users request a language for which there is no translation, an error message displays:

```
The language specified in the URL is not currently supported by this Portal.
(WWC-57383)
```

- When using language codes in URLs, the codes do not stay in the path. The language gets set in the session cookie, and a redirect occurs to a new URL that does not contain the language code.
- Users who request URLs for items for which they do not have privileges will get a message informing them that they are not authorized to view the item.
- Oracle Portal includes the capability of providing rewrite rules for URLs. This enables you to, for example, shorten an otherwise lengthy URL or hide specific path information. You can configure this functionality on the Configure tab of page group properties. Once there, you can also access a help topic that explains this feature in more detail. See also, [Section 4.5.7, "Defining URL Rewrite Rules for a Page Group"](#).
- All files uploaded in support of an item retain the same file name across all versions and translations of that item. When a new document file with a different file name from the other versions is uploaded (for example, for a new version of the item), then all files for all versions and translations of that same attribute (for example, the File Name attribute) will be renamed to match the new file name. This is not only true for documents, it is also true for images, Zip files, or any other file type that is uploaded in support of an item.

C.3.2 How Name, Display Name, and File Name Affect a Path-Based URL

Path-based URLs may use an item's Name, Display Name, File Name, or globally-unique identifier (GUID) to access the item. The value it uses depends on the presence and validity of these attributes.

This section sets forth a few scenarios and shows how the presence and validity of the Name, Display Name, and File Name affect how a path-based URL is formed. It contains the following subsections:

- [Section C.3.2.1, "File-Based Item Type Has an Exposed Name Attribute"](#)
- [Section C.3.2.2, "File-Based Item Type Has a Hidden Name Attribute"](#)
- [Section C.3.2.3, "File-Based Item Type Has No Name Attribute"](#)

Note: For information on the rules that govern the naming of objects in Oracle Portal, see [Appendix D, "Object Naming Rules in Oracle Portal"](#).

For information on which items are accessible in what states, see [Section 17.9.3, "Item URL Security"](#).

C.3.2.1 File-Based Item Type Has an Exposed Name Attribute

The following scenarios concern a file-based item type that has a Name attribute that is exposed through the Create and Edit Item wizards.

User supplies a valid Name, but no Display Name.

The value for the File Name attribute is displayed in the portal. The value for the Name attribute is used in the formation of the path-based URL. In this case, the value for the Name attribute would be the same as the name of the file.

User supplies a valid Name and a valid Display Name.

The value for the Display Name attribute is displayed in the portal. The value for the Name attribute is used in the formation of the path-based URL.

The File Name contains invalid characters.

The value for the Display Name attribute is displayed in the portal. If no value is supplied for the Display Name attribute, the invalid value for the File Name attribute is displayed in the portal.

The Name attribute automatically populates with the invalid file name. If the user clicks Finish without changing this value, an error is generated, and the item is not added. If the user is editing the item, and just clears the value in the Name field, the original value for the Name attribute is used in the formation of the path-based URL. By *original value*, we mean the value that existed before the item was edited.

If the user is adding the item, and simply clears the default value from the Name field, the item's GUID is used in the formation of the path-based URL.

C.3.2.2 File-Based Item Type Has a Hidden Name Attribute

The following scenarios concern a file-based item type that has a Name attribute that is exposed in the Create Item wizard but hidden in the Edit Item wizard. One thing to keep in mind is that, absent a user-supplied value, the Name attribute defaults to the name and extension of the file, for example, if the value in the File Name field is `C:\foldername\filename.txt`, the default value in the Name field is `filename.txt`. Wherever the Name attribute is exposed, the default value can be changed.

User adds a file-based item with a File Name that uses invalid characters. User modifies the Name to remove the invalid characters. User edits the item, where Name attribute is not exposed, adding a new file with a File Name that uses invalid characters.

The original value for the Name attribute is retained. The original value for the Name attribute is used in the formation of the path-based URL.

User adds a file-based item with a file name that uses valid characters. User edits the item, uploading a new file.

The value for the Name attribute defaults to the new value provided for the File Name attribute. The new value for the Name attribute is used in the formation of the path-based URL.

User supplies a valid Name, but no Display Name.

Where the Name attribute is present and has a value (from the Add Item wizard), it is always used in the formation of the path-based URL.

Where no value is supplied for the Name attribute, the file name is taken from the File Name attribute and used for display in the portal and in the formation of the path-based URL.

User supplies a valid Name and a valid Display Name.

Assuming the Name attribute has a value (from the Add Item wizard), the value of the Display Name attribute is displayed in the portal, and the value of the Name attribute is used in the formation of the path-based URL.

The File Name contains invalid characters.

The value of the Display Name attribute is displayed in the portal. If no value is supplied for the Display Name attribute, the invalid File Name is displayed in the portal. The value of the Name attribute is used in the formation of the path-based URL.

C.3.2.3 File-Based Item Type Has No Name Attribute

The following scenarios concern a file-based item type that does not have an associated Name attribute. For the default File item type does not have an associated Name attribute, just File Name and Display Name attributes.

User provides a valid value for the Display Name attribute.

The value for the Display Name attribute is displayed in the portal. The file name is taken from the value of the File Name attribute and used in the formation of the path-based URL.

User does not supply a Display Name.

The file name is taken from the value of the File Name attribute and displayed in the portal as well as used in the formation of the path-based URL.

File name has invalid characters.

The value of the Display Name attribute is displayed in the portal if present. If not present, the invalid File Name is displayed in the portal. The invalid characters are stripped from the File Name to form the internal name, which is used in the formation of the path-based URL.

C.3.3 The Language Parameter in Path-Based and Durable URLs

The following list provides the values you can use for the `lang` parameter in path-based and durable URLs:

- Arabic: `.../lang-ar/...`
- Brazilian Portuguese: `.../lang-pt-BR/...`
- Canadian French: `.../lang-fr-CA/...`
- Chinese (Simplified): `.../lang-zh-CN/...`
- Chinese (Traditional): `.../lang-zh-TW/...`
- Czech: `.../lang-cs/...`
- Danish: `.../lang-da/...`
- Dutch: `.../lang-nl/...`
- English: `.../lang-en/...`
- Finnish: `.../lang-fi/...`
- French: `.../lang-fr/...`
- German: `.../lang-de/...`
- Greek: `.../lang-el/...`
- Hebrew: `.../lang-iw/...`
- Hungarian: `.../lang-hu/...`
- Italian: `.../lang-it/...`

- Japanese: .../lang-ja/...
- Korean: .../lang-ko/...
- Latin American Spanish: .../lang-es/...
- Norwegian: .../lang-no/...
- Polish: .../lang-pl/...
- Portuguese: .../lang-pt/...
- Romanian: .../lang-ro/...
- Russian: .../lang-ru/...
- Slovak: .../lang-sk/...
- Spanish: .../lang-es/...
- Swedish: .../lang-sv/...
- Thai: .../lang-th/...
- Turkish: .../lang-tr/...

Object Naming Rules in Oracle Portal

This appendix summarizes the rules that apply to the naming of objects in Oracle Portal. Unless otherwise indicated, names and display names are not case sensitive. In other words, in most cases *APP* is the same as *app*.

Table D–1 Object Naming Rules in Oracle Portal

Object	Name	Display Name
Attributes	<ul style="list-style-type: none"> ▪ 256 bytes ▪ Must be unique within its page group and the Shared Objects page group ▪ Defaults to Display Name minus invalid characters when no value is entered ▪ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _) 	<ul style="list-style-type: none"> ▪ 256 bytes ▪ Any character, except comma Commas in attribute Display Names interfere with the display of attributes in search-related selection boxes. This is because commas are used as delimiters between attribute names. For example, an attribute with the Display Name <i>Sales, London, UK</i>, appears as three separate, selectable attributes in search-related selection boxes. ▪ Multi-byte characters allowed
Categories	<ul style="list-style-type: none"> ▪ 60 bytes ▪ Case sensitive ▪ Defaults to Display Name minus invalid characters when no value is entered ▪ Must be unique among all categories at the same level within its page group. ▪ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _) 	<ul style="list-style-type: none"> ▪ 240 bytes ▪ Any character ▪ Multi-byte characters allowed
HTML Templates	<ul style="list-style-type: none"> ▪ 50 bytes ▪ Must be unique within its page group ▪ Multi-byte characters allowed ▪ Any character except: , & # % \ / : * ? < > " 	With HTML templates, the <i>Template Name</i> doubles as a Name and a Display Name

Table D–1 (Cont.) Object Naming Rules in Oracle Portal

Object	Name	Display Name
Items and Portlets	<ul style="list-style-type: none"> ■ 256 bytes or 126 bytes for file names ■ Case sensitive ■ Must be unique within its parent page; when tabs are present, must be unique within a given tab. ■ Multi-byte characters allowed ■ Anything except: , & # % \ / : * ? < > " ■ In the case of uploaded files, defaults to file name; if file name contains illegal characters, defaults to GUID 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character; in the case of uploaded files, defaults to file name if unspecified ■ Multi-byte characters allowed
Item Types	<ul style="list-style-type: none"> ■ 30 bytes ■ Must be unique within its page group and the Shared Objects page group ■ Defaults to Display Name minus invalid characters when no value is entered ■ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _) 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character ■ Multi-byte characters allowed
Navigation Pages	<ul style="list-style-type: none"> ■ 60 bytes ■ Case sensitive ■ Defaults to Display Name minus invalid characters when no value is entered ■ Must be unique within its page group ■ Multi-byte characters allowed ■ Anything except: , & # % \ / : * ? < > " 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character ■ Multi-byte characters allowed
Page Groups	<ul style="list-style-type: none"> ■ 60 bytes ■ Case sensitive ■ Defaults to Display Name minus invalid characters when no value is entered ■ Must be unique among page groups ■ Multi-byte characters allowed ■ Anything except: , & # % \ / : * ? < > " 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character, except comma Commas in page group Display Names interfere with the display of page groups in search-related selection boxes. This is because commas are used as delimiters between page group names. For example, a page group with the Display Name <i>Sales, London, UK</i>, appears as three separate, selectable page groups in search-related selection boxes. ■ Multi-byte characters allowed

Table D-1 (Cont.) Object Naming Rules in Oracle Portal

Object	Name	Display Name
Pages	<ul style="list-style-type: none">■ 60 bytes■ Case sensitive■ Defaults to Display Name minus invalid characters when no value is entered■ Must be unique among all pages that are at the same level in its page group's page hierarchy.■ Multi-byte characters allowed■ Anything except: , & # % \ / : * ? < > "	<ul style="list-style-type: none">■ 256 bytes■ Any character■ Multi-byte characters allowed
Page Types	<ul style="list-style-type: none">■ 30 bytes■ Must be unique within its page group and the Shared Objects page group■ Defaults to Display Name minus invalid characters when no value is entered■ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _)	<ul style="list-style-type: none">■ 256 bytes■ Any character■ Multi-byte characters allowed
Parameters	<ul style="list-style-type: none">■ 200 bytes■ Case sensitive■ Must be unique within its parent page■ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _)	<ul style="list-style-type: none">■ 4000 bytes■ Any character; defaults to Name if unspecified■ Multi-byte characters allowed
Perspectives	<ul style="list-style-type: none">■ 60 bytes■ Case sensitive■ Defaults to Display Name minus invalid characters when no value is entered■ Must be unique among all perspectives at the same level within its page group. Must be unique within its page group and the Shared Objects page group.■ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _)	<ul style="list-style-type: none">■ 240 bytes■ Any character■ Multi-byte characters allowed

Table D-1 (Cont.) Object Naming Rules in Oracle Portal

Object	Name	Display Name
Portal Templates	<ul style="list-style-type: none"> ■ 60 bytes ■ Case sensitive ■ Must be unique within its page group ■ Defaults to Display Name minus invalid characters when no value is entered ■ Multi-byte characters allowed ■ Anything except: , & # % \ / : * ? < > " 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character ■ Multi-byte characters allowed
Regions	Regions do not have a <i>Name</i> field	<ul style="list-style-type: none"> ■ 4000 bytes ■ Any character ■ Multi-byte characters allowed
Styles	<ul style="list-style-type: none"> ■ 65 bytes ■ Must be unique within the page group ■ Defaults to Display Name minus invalid characters when no value is entered ■ Alphanumeric and underscore (A to Z, a to z, 0 to 9, and _) 	<ul style="list-style-type: none"> ■ 350 bytes ■ Any character ■ Multi-byte characters allowed
Tabs	<ul style="list-style-type: none"> ■ 60 bytes ■ Case sensitive ■ Must be unique within its tab set; by <i>tab set</i> we mean all tabs at the same level within the same set, excluding sub-tabs; sub-tabs are members of their own tab sets ■ Multi-byte characters allowed ■ Anything except: , & # % \ / : * ? < > " 	<ul style="list-style-type: none"> ■ 256 bytes ■ Any character; defaults to <i>New Tab</i> if unspecified ■ Multi-byte characters allowed

Notes

In Oracle Portal, Name uniqueness is preserved automatically by the addition of a value.

If the Shared Objects page group contains an object that uses the same name as an object that you move to the Shared Objects page group, Oracle Portal appends a value to the Name (internal name) of the moved object. This is to maintain name uniqueness within the page group.

For example, imagine that the Shared Objects page group contains a category named *sample_category*. Another page group, *Division*, contains a category that is also named *sample_category*. You move *sample_category* from the *Division* page group to the *Shared Objects* page group. Oracle Portal appends a value to the moved category, such as *sample_category_AABkUWAAJAABpiAAC*. You can revise the internal name, but you cannot give it the same Name as any other object in the Shared Objects page group.

The same rule applies when you try to create any object with a Display Name that duplicates another object's Name. Oracle Portal uses an object's Display Name to create the object's (internal) Name. If you enter the Display Name *red* for an object, and another object already uses the name *red*. The first object's Display Name will be *red*, but its Name will have a value appended to it to make it unique, for example, *red1*.



Substitution Tags for HTML and Unstructured UI Templates

When you create HTML and Unstructured User Interface templates for your portal, you can use substitution tags to stand in for Oracle Portal user interface elements, such as an Edit button, and for variable types of information, such as content attributes, categories, and perspectives. When the template is rendered, actual values replace the tag.

For example, an HTML content layout might contain an #ITEM.PAGENAME# tag. This tag stands in for the display name of a page that contains a region that is using the HTML content layout template. When the template is rendered on the region, the host page's display name is returned.

Three sets of substitution tags are available for use within Oracle Portal: HTML page skin, HTML content layout, and Unstructured User Interface template tags. This appendix lists and describes these tag sets and provides examples of their use. It contains the following main sections:

- [Section E.1, "Substitution Tags for HTML Page Skins"](#)
- [Section E.2, "Style Element Classes Used with Oracle Portal Styles"](#)
- [Section E.3, "Substitution Tags for HTML Content Layouts"](#)
- [Section E.4, "Database Portlet Substitution Tags"](#)

For more information about how to create and use HTML templates, see [Chapter 12, "Providing a Standard Look and Feel"](#).

E.1 Substitution Tags for HTML Page Skins

You can introduce portal elements into your HTML page skin through HTML page skin substitution tags. Use these to introduce such Oracle Portal elements as page Edit or Personalize links, the name of the currently logged-in user, the current page's display name, and so on.

Use HTML page skins with your portal pages. Make your selection on the Template tab of page properties. For more information, see [Section 12.3.1.1, "Creating an HTML Page Skin"](#).

[Table E-1](#) lists and describes the substitution tags available for use in HTML page skin templates. These tags take their values from values that were entered in the wizard that was used to build the host page (that is, the page using the template) and from other Oracle Portal settings.

Note: Before you use any of the tags described in this section, there are a few things it may be useful to know:

- Users have access to only those objects for which they have privileges. For example, if a user does not have the Personalize privilege on a page, he or she cannot use the Personalize hyperlink, even though it may be present in the HTML page skin. In such a case, the tag will be null.
 - If you use relative links in your HTML Page Skin template, you must include the #PAGE.BASE# tag in the <HEAD></HEAD> section the template or specifically set the base tag yourself.
 - The tag #PAGE.STYLE.URL#, used in previous versions of Oracle Portal, is no longer supported. Users with legacy Unstructured User Interface templates must manually update any uses of this tag to #PAGE.STYLE#, described in [Table E-1](#).
-
-

Table E-1 HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#BODY#	The main body area of the page This contains all the regions and region content that are wrapped in the page skin.
#OWNER#	The Portal schema
#IMAGE_PREFIX#	The Oracle Portal images directory as specified in the plsql.conf configuration file
#USER#	The user name of the user who is currently logged on For pages cached at the system level, all user tags are rendered null.
#USER.FULLNAME#	The full name of the user who is currently logged on Note that: <ul style="list-style-type: none"> ■ The full name includes the user's first, middle, and last names. ■ For pages cached at the system level, all user tags are rendered null.
#USER.FIRSTNAME#	The first name of the user who is currently logged on Note that, for pages cached at the system level, all user tags are rendered null.
#USER.MIDDLENAME#	The middle name of the user who is currently logged on Note that, for pages cached at the system level, all user tags are rendered null.
#USER.LASTNAME#	The last name (surname) of the user who is currently logged on Note that, for pages cached at the system level, all user tags are rendered null.
#VERSION#	The version of this installation of Oracle Portal

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#HELPSCRIPT#	<p>Renders the JavaScript that pops up a window to display help</p> <p>Use this tag between the HTML <HEAD></HEAD> tags. For example:</p> <pre data-bbox="654 344 1268 600"><HTML dir=#DIRECTION#> <HEAD> <TITLE>#TITLE#</TITLE> #HELPSCRIPT# #PAGE.STYLE# #PAGE.BASE# </HEAD> <BODY leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0"></pre> <p>To call a specific help topic:</p> <pre data-bbox="654 680 1377 705">Help</pre>
#DIRECTION#	<p>The direction of character layout (left-to-right or right-to-left)</p> <p>This value is set based on the language selected for the portal. Use it in conjunction with portals using bi-directional languages. For example, using PL/SQL (between <oracle></oracle> tags), you can set up if statements that query the current text direction and, based on the result, set the alignment of template elements using the #ALIGN_LEFT# and #ALIGN_RIGHT# tags.</p> <p>Place this tag within the <HTML> tag, for example:</p> <pre data-bbox="654 1010 1268 1266"><HTML dir=#DIRECTION#> <HEAD> <TITLE>#TITLE#</TITLE> #HELPSCRIPT# #PAGE.STYLE# #PAGE.BASE# </HEAD> <BODY leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0"></pre>
#ALIGN_LEFT#	Align content to the left
#ALIGN_RIGHT#	Align content to the right

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By ...
#PAGE.PAGEID#	<p>The page ID of the page using the HTML page skin</p> <p>This tag and the #page.pagegroupid# tag can be used in a query against the public view of a page. In the following example, assume that the privilege to view WWSBR_USER_FOLDERS is granted to the user or to PUBLIC:</p> <pre data-bbox="573 401 1317 884"> <oracle> begin http.p('Page=#page.pageid#'); http.br; http.p('PageGroup=#page.pagegroupid#'); http.br; for c1 in (select display_name, language from #owner#.WWSBR_USER_FOLDERS where id = #page.pageid# and caid = #page.pagegroupid#) loop http.p(' Page title = ' c1.display_name ' language = ' c1.language); http.br; end loop; end; </oracle> </pre>
#PAGE.PAGEGROUPID#	<p>The page group ID of the page using the HTML page skin</p> <p>See the example provided in #page.pageid#.</p>
#TITLE#	<p>The display name assigned to the page through the portal</p> <p>Use this tag in the page header. For example:</p> <pre data-bbox="573 1104 1187 1360"> <HTML dir=#DIRECTION#> <HEAD> <TITLE>#TITLE#</TITLE> #HELPSCRIPT# #PAGE.STYLE# #PAGE.BASE# </HEAD> <BODY leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0"> </pre>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By ...
#PAGE.STYLE#	<p data-bbox="651 260 1328 285">Fetches all relevant style classes and embeds them in the HTML</p> <p data-bbox="651 300 1312 325">This tag is allowed only in the document HEAD. For example:</p> <pre data-bbox="651 342 1268 600"> <HTML dir=#DIRECTION#> <HEAD> <TITLE>#TITLE#</TITLE> #HELPSCRIPT# #PAGE.STYLE# #PAGE.BASE# </HEAD> <BODY leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0"> </pre> <p data-bbox="651 638 1442 772">This tag pulls its information from the Oracle Portal style that is applied to the page that is using the HTML page skin template. You can use this tag, define your own cascading style sheet (CSS) for the page, or embed the Oracle Portal style element classes between <style></style> tags in the template header.</p> <p data-bbox="651 787 1446 921">If you define your own style through a CSS or embed the Oracle Portal style element classes, consider omitting the #page.style# tag from the HTML page skin template. The style element classes included by the #page.style# tag may conflict with the styles you include in the template or in your CSS.</p> <p data-bbox="651 936 1386 982">The style element classes used with Oracle Portal styles are listed and described in Table E-2.</p>
#PAGE.BASE#	<p data-bbox="651 1003 1373 1058">The base URL of the page to which the HTML Page Skin template is applied</p> <p data-bbox="651 1073 1312 1098">This tag is allowed only in the document HEAD. For example:</p> <pre data-bbox="651 1115 1268 1373"> <HTML dir=#DIRECTION#> <HEAD> <TITLE>#TITLE#</TITLE> #HELPSCRIPT# #PAGE.STYLE# #PAGE.BASE# </HEAD> <BODY leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0"> </pre> <p data-bbox="651 1411 1442 1486">This tag contains a full reference to the location of the portal page to which the HTML Page Skin template is applied. This includes the base page URL and the relevant associated HTML.</p> <p data-bbox="651 1501 1386 1581">If you use relative links in your HTML Page Skin template, you must include the #PAGE.BASE# tag in the <HEAD></HEAD> section the template.</p>
#PAGE.BASE.URL#	<p data-bbox="651 1602 1360 1627">The base URL of the page to which the HTML Page Skin is applied</p> <p data-bbox="651 1642 1438 1696">This is a subset of #PAGE.BASE#. It contains just the URL. Enclose this tag in a base href tag. For example:</p> <pre data-bbox="651 1713 1008 1736"> <base href="#PAGE.BASE.URL#"> </pre>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#PORTAL.HOME#	<p>The HTML image hyperlink to the portal home page</p> <p>This tag contains everything required to render a hyperlinked icon and label (the label displays as ALT text when users roll over the icon). Use this tag by itself to place a link to your portal's home page in your HTML Page Skin template. Alternatively, you can use the #PORTAL.HOME.URL#, #PORTAL.HOME.IMAGE#, and #PORTAL.HOME.LABEL#, plus the relevant HTML to create the same effect.</p>
#PORTAL.HOME.URL#	<p>The URL of the portal home page</p> <p>Place this tag inside an href tag. For example:</p> <pre>#portal.home.label#</pre> <p>Or</p> <pre> <img src="#portal.home.image#" alt="#portal.home.label#" </pre>
#PORTAL.HOME.IMAGE#	<p>The image used for the portal home page link</p> <p>Always use this tag inside an img src tag. For example:</p> <pre></pre> <p>See the entry for #portal.home.url# for another usage example.</p>
#PORTAL.HOME.LABEL#	<p>The text used for the portal home page hyperlink, by default: <i>Home</i></p> <p>See the entry for #portal.home.url# for examples.</p>
#PORTAL.NAVIGATOR#	<p>The HTML image hyperlink to the Portal Navigator</p> <p>This tag contains everything required to render a hyperlinked icon and label (the label displays as ALT text when users roll over the icon). Use this tag by itself to place a link to the Portal Navigator in your HTML Page Skin template. Alternatively, you can use the #PORTAL.NAVIGATOR.URL#, #PORTAL.NAVIGATOR.IMAGE#, and #PORTAL.NAVIGATOR.LABEL#, plus the relevant HTML to create the same effect.</p>
#PORTAL.NAVIGATOR.URL#	<p>The URL of the Portal Navigator</p> <p>Place this tag inside an href tag. For example:</p> <pre>#portal.navigator.label#</pre> <p>Or</p> <pre> <img src="#portal.navigator.image#" alt="#portal.navigator.label#" </pre>
#PORTAL.NAVIGATOR.IMAGE#	<p>The image used for the Portal Navigator link</p> <p>Always use this tag inside an img src tag. For example:</p> <pre></pre> <p>See the entry for #portal.navigator.url# for another usage example.</p>
#PORTAL.NAVIGATOR.LABEL#	<p>The text used for the Portal Navigator hyperlink, by default: <i>Navigator</i></p> <p>See the entry for #portal.navigator.url# for examples.</p>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#PORTAL.HELP#	<p>The HTML image hyperlink to the Oracle Portal online help</p> <p>This tag contains everything required to render a hyperlinked icon and label (the label displays as ALT text when users roll over the icon). Use this tag by itself to place a link to Oracle Portal online help in your HTML Page Skin template. Alternatively, you can use the #PORTAL.HELP.URL#, #PORTAL.HELP.IMAGE#, and #PORTAL.HELP.LABEL#, plus the relevant HTML to create the same effect.</p>
#PORTAL.HELP.URL#	<p>The URL of the Oracle Portal online help</p> <p>Place this tag inside an href tag. For example:</p> <pre data-bbox="651 562 1279 583">#portal.help.label#</pre> <p>Or</p> <pre data-bbox="651 667 1354 751"> </pre>
#PORTAL.HELP.IMAGE#	<p>The image used for the Oracle Portal online help link</p> <p>Always use this tag inside an img src tag. For example:</p> <pre data-bbox="651 877 1036 898"></pre> <p>See the entry for #portal.help.url# for another usage example.</p>
#PORTAL.HELP.LABEL#	<p>The text used for the Oracle Portal online help hyperlink, by default: <i>Help</i></p> <p>See the entry for #portal.help.url# for examples.</p>
#PORTAL.COMMUNITY#	<p>The HTML image hyperlink to the Portal Community Web site</p> <p>This tag contains everything required to render a hyperlinked icon and label (the label displays as ALT text when users roll over the icon). Use this tag by itself to place a link to the Portal Community Web site in your HTML Page Skin template. Alternatively, you can use the #PORTAL.COMMUNITY.URL#, #PORTAL.COMMUNITY.IMAGE#, and #PORTAL.COMMUNITY.LABEL#, plus the relevant HTML to create the same effect.</p>
#PORTAL.COMMUNITY.URL#	<p>The URL of the Portal Community Web site</p> <p>Place this tag inside an href tag. For example:</p> <pre data-bbox="651 1402 1403 1423">#portal.community.label#</pre> <p>Or</p> <pre data-bbox="651 1507 1078 1612"> </pre>
#PORTAL.COMMUNITY.IMAGE#	<p>The image used for the Portal Community Web site link</p> <p>Always use this tag inside an img src tag. For example:</p> <pre data-bbox="651 1749 1094 1770"></pre> <p>See the entry for #portal.community.url# for another usage example.</p>
#PORTAL.COMMUNITY.LABEL#	<p>The text of the Portal Community hyperlink, by default: <i>Community</i></p> <p>See the entry for #portal.community.url# for examples.</p>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#PAGE.EDITPAGE#	<p>The Edit hyperlink to portal page editing functionality</p> <p>This tag contains everything required to render a hyperlink. Use this tag by itself to place an Edit page link in your HTML Page Skin template. Alternatively, you can use the #PORTAL.EDITPAGE.URL# and #PORTAL.EDITPAGE.LABEL#, plus the relevant HTML to create the same effect.</p> <p>When the Edit link is placed on a navigation page, and the navigation page is rendered on a page, the Edit link executes on the page and not on the navigation page.</p> <p>The value of this tag is returned only if the user has the page privilege <i>Manage</i> on the page.</p>
#PAGE.EDITPAGE.URL#	<p>The HTML text to allow page URL editing</p> <p>Place this tag inside an href tag. For example:</p> <pre data-bbox="573 688 1252 716">#page.editpage.label#</pre> <p>When the Edit link is placed on a navigation page, and the navigation page is rendered on a page, the Edit link executes on the page and not on the navigation page.</p> <p>The value of this tag is returned only if the user has the page privilege <i>Manage</i> on the page.</p>
#PAGE.EDITPAGE.LABEL#	<p>The text for the Edit page hyperlink, by default: <i>Edit</i></p> <p>When the Edit link is placed on a navigation page, and the navigation page is rendered on a page, the Edit link executes on the page and not on the navigation page.</p> <p>The value of this tag is returned only if the user has the page privilege <i>Manage</i> on the relevant page.</p> <p>See the entry for #page.editpage.url# for examples.</p>
#PAGE.CUSTOMIZEPAGE#	<p>The hyperlink to the personalize page dialog</p> <p>This tag contains everything required to render a hyperlink. Use this tag by itself to place a Personalize page link in your HTML Page Skin template. Alternatively, you can use the #PAGE.CUSTOMIZEPAGE.URL# and #PAGE.CUSTOMIZEPAGE.LABEL#, plus the relevant HTML to create the same effect.</p> <p>The value of this tag is returned only if the user has sufficient privileges to personalize the page.</p>
#PAGE.CUSTOMIZEPAGE.URL#	<p>The URL that renders the personalize page view</p> <p>Use this in conjunction with the #PAGE.CUSTOMIZEPAGE.LABEL# tag to construct your Personalize link. For example:</p> <pre data-bbox="573 1528 1003 1583">#PAGE.CUSTOMIZEPAGE.LABEL#</pre> <p>The value of this tag is returned only if the user has sufficient privileges to personalize the page.</p>
#PAGE.CUSTOMIZEPAGE.LABEL#	<p>The text for the personalize page link, by default: <i>Personalize</i></p> <p>The value of this tag is returned only if the user has sufficient privileges to personalize the page.</p>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By ...
#PAGE.REFRESH#	<p>The page refresh hyperlink</p> <p>This tag contains everything required to render a hyperlink. Use this tag by itself to place a Refresh page hyperlink in your HTML Page Skin template. Alternatively, you can use the #PAGE.REFRESH.URL# and #PAGE.REFRESH.LABEL#, plus the relevant HTML to create the same effect.</p> <p>When this tag is placed on a navigation page, and the navigation page is rendered on a page, the Refresh link executes on the page and not on the navigation page.</p> <p>The Refresh hyperlink displays only when the page's cache mode is set to Cache Page Definition and Content.</p>
#PAGE.REFRESH.URL#	<p>The URL that invokes the page refresh functionality</p> <p>Use this in conjunction with the #PAGE.REFRESH.LABEL# tag to construct your Refresh hyperlink. For example:</p> <pre data-bbox="654 716 1008 772"> #page.refresh.label#</pre> <p>When the Refresh link is placed on a navigation page, and the navigation page is rendered on a page, the Refresh link executes on the page and not on the navigation page.</p> <p>The Refresh hyperlink displays only when the page's cache mode is set to Cache Page Definition and Content.</p>
#PAGE.REFRESH.LABEL#	<p>The text used for the refresh hyperlink, by default: <i>Refresh</i></p> <p>When the Refresh link is placed on a navigation page, and the navigation page is rendered on a page, the Refresh link executes on the page and not on the navigation page.</p> <p>The Refresh hyperlink displays only when the page's cache mode is set to Cache Page Definition and Content.</p> <p>See the entry for #page.refresh.url# for a usage example.</p>
#PORTAL.LOGOUT#	<p>The Oracle Portal Logout hyperlink</p> <p>This tag contains everything required to render a hyperlink. Use this tag by itself to place a Logout hyperlink in your HTML Page Skin template. Alternatively, you can use the #PORTAL.LOGOUT.URL# and #PORTAL.LOGOUT.LABEL#, plus the relevant HTML to create the same effect.</p> <p>The Logout hyperlink toggles between Logout and Login, depending on its current state.</p>
#PORTAL.LOGOUT.URL#	<p>The Oracle Portal logout URL</p> <p>Use this in conjunction with the #PORTAL.LOGOUT.LABEL# tag to construct your Logout hyperlink. For example:</p> <pre data-bbox="654 1581 1024 1638"> #portal.logout.label#</pre> <p>The Logout hyperlink toggles between Logout and Login, depending on its current state.</p>
#PORTAL.LOGOUT.LABEL#	<p>The text used for the logout hyperlink, by default: <i>Logout</i></p> <p>The Logout hyperlink toggles between Logout and Login, depending on its current state.</p> <p>See the entry for #portal.logout.url# for a usage example.</p>

Table E-1 (Cont.) HTML Page Skin Substitution Tags

Substitution Tag	Value Set By...
#PORTAL.ACCOUNTINFO#	The hyperlink to the account information dialog This tag contains everything required to render a hyperlink. Use this tag by itself to place an Account Info hyperlink in your HTML Page Skin template. Alternatively, you can use the #PORTAL.ACCOUNTINFO.URL# and #PORTAL.ACCOUNTINFO.LABEL#, plus the relevant HTML to create the same effect. Users must be logged in to see the Account Info hyperlink.
#PORTAL.ACCOUNTINFO.URL#	The URL to the account information dialog Use this in conjunction with the #PORTAL.ACCOUNTINFO.LABEL# tag to construct your Account Info hyperlink. For example: <pre> portal.accountinfo.label#</pre> Users must be logged in to see the Account Info hyperlink.
#PORTAL.ACCOUNTINFO.LABEL#	The text used for the account information hyperlink, by default: <i>Account Info</i> Users must be logged in to see the Account Info hyperlink. See the entry for #portal.accountinfo.url# for a usage example.

E.2 Style Element Classes Used with Oracle Portal Styles

If you plan to apply your own cascading style sheet (CSS) to your portal pages or to include Oracle Portal-specific style classes in an HTML template, it will be useful to know the style element classes used by Oracle Portal styles to define the look and feel of every portal object.

This section provides a series of tables that list and describe the style element classes associated with Oracle Portal styles. It includes the following subsections:

- [Section E.2.1, "Style Element Classes Associated with Common Elements"](#)
- [Section E.2.2, "Style Element Classes Associated with Tabs"](#)
- [Section E.2.3, "Style Element Classes Associated with Items"](#)
- [Section E.2.4, "Style Element Classes Associated with Portlets"](#)

For information on how to include style element classes or a CSS with Oracle Portal pages, see [Section 11.12, "Using Portal Style Element Classes in HTML Templates and CSSs"](#)

E.2.1 Style Element Classes Associated with Common Elements

[Table E-2](#) lists and describes style element classes associated with the common elements defined in an Oracle Portal style.

Where variables are indicated, the following applies:

- *idn* is an internally generated number that identifies the style in use.
- *siteidnn*, is an internally generated number that identifies the page group.

If you plan to use Oracle Portal style element classes, consider always setting your page style to Main. This way, the values for *idnsiteidnn* are predictable. That is: *id1siteid0*.

Table E-2 Style Element Classes Associated with Common Elements

Style Element	Description/Example
Bodyid n siteid m	The color or image used for the background of the page or region <pre>.Bodyid1siteid0{Background-Color:#FFFFFF;}</pre>
RegionHeaderid n siteid m	The color, height, and alignment of text in the banners that display above each region in a page <pre>.RegionHeaderid1siteid0{Background-Color:#336699; Height:20;Text-Align:Left;}</pre>
RegionHeaderTextid n siteid m	The color, font face, font size, font style, and font decoration of regular text in the banners that display above each region in a page <pre>.RegionHeaderTextid1siteid0{Color:#FFFFFF; Font-Family:Arial,Helvetica;Font-Size:0.75em; Font-Weight:bold;}</pre>
RegionNoBorder	Determines what to display when no border is selected (usually set to nothing) <pre>RegionNoBorder{}</pre>
RegionBorder	The color, width, and style of the table border that is used to display a region <pre>.RegionBorder{border:#336699 1px solid;}</pre>
RegionHeaderColor	The color, background color, width, and style of the table and border that is used to display a region header <pre>.RegionHeaderColor{background-color:; border:#336699 0px solid;}</pre>
PageColor	The background color of a page <pre>.PageColor{background-color:#FFFFFF}</pre>
LeftCurve	The image and image position of the left side of a region header <pre>.LeftCurve{Background-Attachment:scroll; Background-Image:url(https://company.us.myco.com:5555 /images/FFFFFFl.gif); Background-Position:left top; Background-Repeat:no-repeat;}</pre>
RightCurve	The image and image position of the right side of a region header <pre>.RightCurve{Background-Attachment:scroll; Background-Image:url(https://company.us.myco.com:5555 /images/FFFFFFr.gif); Background-Position:right top; Background-Repeat:no-repeat;}</pre>

E.2.2 Style Element Classes Associated with Tabs

Table E-3 lists and describes style element classes associated with the tab elements defined on an Oracle Portal style sheet.

Where variables are indicated, the following applies:

- `idn` is an internally generated number that identifies the style in use.
- `siteidnn`, is an internally generated number that identifies the page group.

If you plan to use a CSS with your Oracle Portal pages, consider always setting your page style to Main. This way, the values for `idnsiteidnn` are predictable. That is: `id1steid0`.

Table E-3 Style Element Classes Associated with Tabs

Style Element	Description/Example
<code>LeftSubTabidnsiteidnn</code>	The color and images of an active main or sub-tab
<code>LeftTabForeSlantidnsiteidnn</code>	The active tab is the tab that is currently selected.
<code>RightSubTabidnsiteidnn</code>	<code>.LeftSubTabid1siteid0</code>
<code>RightTabForeCurveidnsiteidnn</code>	<code>{Background-Attachment:scroll;</code> <code>Background-Color:#336699;</code>
<code>TabForegroundColoridnsiteidnn</code>	<code>Background-Image:url (https://mycompany.us.myco.com:5555/images/FFFFFFsl.gif);</code> <code>Background-Position:left top;</code> <code>Background-Repeat:no-repeat;}</code>
	<code>.LeftTabForeSlantid1siteid0</code> <code>{Background-Attachment:scroll;</code> <code>Background-Color:#336699;</code> <code>Background-Image:url (https://mycompany.us.myco.com:5555/images/FFFFFFtl.gif);</code> <code>Background-Position:left top;</code> <code>Background-Repeat:no-repeat;}</code>
	<code>.RightSubTabid1siteid0</code> <code>{Background-Attachment:scroll;</code> <code>Background-Color:#336699;</code> <code>Background-Image:url (https://mycompany.us.myco.com:5555/images/FFFFFFsr.gif);</code> <code>Background-Position:right top;</code> <code>Background-Repeat:no-repeat;}</code>
	<code>.RightTabForeCurveid1siteid0</code> <code>{Background-Attachment:scroll;</code> <code>Background-Color:#336699;</code> <code>Background-Image:url (https://mycompany.us.myco.com:5555/images/FFFFFFtr.gif);</code> <code>Background-Position:right top;</code> <code>Background-Repeat:no-repeat;}</code>
	<code>.TabForegroundColorid1siteid0</code> <code>{Background-Color:#336699;}</code>

Table E-3 (Cont.) Style Element Classes Associated with Tabs

Style Element	Description/Example
TabForegroundTextidnsiteidnn	<p>The color, font face, font size, font style, and font decoration of the text on the active tab</p> <p>The active tab is the tab that is currently selected.</p> <pre>.TabForegroundTextid1siteid0{Color:#FFFFFF; Text-Decoration:none; Font-Family:Arial, Helvetica; Font-Size:0.92em;Font-Weight:bold;}</pre>
LeftTabBgSlantidnsiteidnn	The color and images to use for inactive main or sub-tabs
RightTabBgCurveidnsiteidnn	Inactive tabs are the tabs that are not currently selected.
SubTabBgTextidnsiteidnn	.LeftTabBgSlantid1siteid0
TabBackgroundColoridnsiteidnn	<pre>{Background-Attachment:scroll; Background-Color:#CCCC99; Background-Image:url (https://mycompany.us.myco.com: 5555/images/FFFFFFtl.gif); Background-Position:left top; Background-Repeat:no-repeat;} .RightTabBgCurveid1siteid0 {Background-Attachment:scroll; Background-Color:#CCCC99; Background-Image:url (https://mycompany.us.myco.com: 5555/images/FFFFFFtr.gif); Background-Position:right top; Background-Repeat:no-repeat;} .SubTabBgTextid1siteid0{Color:#CCCC99; Text-Decoration:none; Font-Family:Arial, Helvetica; Font-Size:0.92em;} .TabBackgroundColorid1siteid0 {Background-Color:#CCCC99;}</pre>
TabBackgroundTextidnsiteidnn	<p>The color, font face, font size, font style, and font decoration of the text on inactive tabs</p> <p>Inactive tabs are the tabs that are not currently selected.</p> <pre>.TabBackgroundTextid1siteid0{Color:#003366; Text-Decoration:none; Font-Family:Arial, Helvetica; Font-Size:0.92em;}</pre>

E.2.3 Style Element Classes Associated with Items

Table E-4 lists and describes style element classes associated with the item elements defined on an Oracle Portal style sheet.

Where variables are indicated, the following applies:

- *idn* is an internally generated number that identifies the style in use.
- *siteidnn*, is an internally generated number that identifies the page group.

If you plan to use a CSS with your Oracle Portal pages, consider always setting your page style to Main. This way, the values for `id n siteid m` are predictable. That is: `id1steid0`.

Many of the item-related style element classes provide style definitions for Oracle Portal attributes. For a list and description of those attributes, see [Section A.2, "Base Attributes"](#).

Table E-4 Style Element Classes Associated with Items

Style Element	Description/Example
<code>GroupHeaderidnsiteidm</code>	The color, height, and alignment of text in the banners that appear above each group of items in a page <code>.GroupHeaderid1siteid0 {Background-Color:#336699; Height:20;Text-Align:left;}</code>
<code>GroupHeaderTextidnsiteidm</code>	The color, font face, font size, font style, and font decoration of regular (non-linked) text in the banners that appear above each group of items in a page <code>.GroupHeaderTextid1siteid0{Color:#FFFFFF; Font-Family:Arial, Helvetica;Font-Size:0.75em; Font-Weight:bold;Text-Decoration:none;}</code>
<code>GroupHeaderLinkidnsiteidm</code>	The color, font face, font size, font style, and font decoration of links in the banners that appear above each group of items in a page <code>.GroupHeaderLinkid1siteid0{Color:#FFFFFF; Font-Family:Arial, Helvetica;Font-Size:0.75em; Font-Weight:bold;Text-Decoration:none;}</code>
<code>defaultattributeidnsiteidm</code>	The color, font face, font size, font style, and font decoration of any attribute that is not explicitly listed as a style element property for items <code>.defaultattributeid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</code>
<code>subpagetitleidnsiteidm</code>	The color, font face, font size, font style, and font decoration of the sub-page Display Name attribute <code>.subpagetitleid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</code>
<code>itemfunctionidnsiteidm</code>	The color, font face, font size, font style, and font decoration of the Associated Functions attribute <code>.itemfunctionid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</code>

Table E-4 (Cont.) Style Element Classes Associated with Items

Style Element	Description/Example
<code>authoridnsiteidnn</code>	The color, font, font face, font size, font style, and font decoration of the Author attribute <pre>.authoridnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_itemtype_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the Base Item Type attribute <pre>.wwsbr_itemtype_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_category_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the Category attribute <pre>.wwsbr_category_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_updatedate_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the Date Updated attribute <pre>.wwsbr_updatedate_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_updater_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the Last Updated By attribute <pre>.wwsbr_updater_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_page_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the page Display Name attribute <pre>.wwsbr_page_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_pagegroup_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the page group Display Name attribute <pre>.wwsbr_pagegroup_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>wwsbr_publishdate_idnsiteidnn</code>	The color, font face, font size, font style, and font decoration of the Publish Date attribute <pre>.wwsbr_publishdate_idnsiteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>

Table E-4 (Cont.) Style Element Classes Associated with Items

Style Element	Description/Example
<code>createdateidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the Create Date attribute <pre>.createdateid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>creatoridnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the Creator attribute <pre>.creatorid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>descriptionidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the Description attribute <pre>.descriptionid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>titleidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the item Display Name attribute <pre>.titleid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Font-Weight:Bold;Text-Decoration:none;}</pre>
<code>titleorimageidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the Link - Image OR Display Name attribute <pre>.titleorimageid1siteid0{Color:#336699; Font-Family:Arial, Helvetica;Font-Size:0.75em; Font-Weight:Bold;Text-Decoration:none;}</pre>
<code>documentsizeidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the document size attribute <pre>.documentsizeid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>expiredateidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the expire date attribute <pre>expiredateid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
<code>inplacedisplayidnsiteidnm</code>	The color, font face, font size, font style, and font decoration of the item content attribute <pre>.inplacedisplayid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>

Table E-4 (Cont.) Style Element Classes Associated with Items

Style Element	Description/Example
keywordsidnsiteidnm	The color, font face, font size, font style, and font decoration of the keywords attribute <pre>.keywordsid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em;}</pre>
perspectivesidnsiteidnm	The color, font face, font size, font style, and font decoration of the perspective attribute <pre>.perspectivesid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em; Text-Decoration:none;}</pre>
scoreidnsiteidnm	The color, font face, font size, font style, and font decoration of the score attribute <pre>.scoreid1siteid0{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em;}</pre>

E.2.4 Style Element Classes Associated with Portlets

Table E-5 lists and describes style element classes associated with the portlet elements defined on an Oracle Portal style sheet.

Table E-5 Style Element Classes Associated with Portlets

Style Element	Description
PortletHeaderColor	The color of portlet headers <pre>.PortletHeaderColor{Background-Color:#336699;}</pre>
PortletHeaderText	The color, font face, font size, font style, and font decoration of regular (non-linked) text in portlet headers <pre>.PortletHeaderText{Color:#FFFFFF; Font-Family:Arial, Helvetica;Font-Size:0.83em; Font-Weight:bold;Text-Decoration:none;}</pre>
PortletHeaderLink	The color, font face, font size, font style, and font decoration of links in portlet headers <pre>.PortletHeaderLink{Color:#FFFFFF; Font-Family:Arial, Helvetica;Font-Size:0.67em;}</pre>
PortletHeaderStyle	Determines whether portlet headers have square or rounded edges <pre>.PortletHeaderStyle{}</pre>
PortletSubHeaderColor	The color of portlet subheaders <pre>.PortletSubHeaderColor{Background-Color:#EEEEDD;}</pre>

Table E-5 (Cont.) Style Element Classes Associated with Portlets

Style Element	Description
PortletSubHeaderText	The color, font face, font size, font style, and font decoration of regular (non-linked) text in portlet sub-headers <pre>.PortletSubHeaderText{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.75em;}</pre>
PortletSubHeaderLink	The color, font face, font size, font style, and font decoration of links in portlet sub-headers <pre>.PortletSubHeaderLink{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.75em;}</pre>
PortletBodyColor	The color of the main body of portlets <pre>.PortletBodyColor{}</pre>
PortletHeading1	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletHeading1 tag <pre>.PortletHeading1{Color:#336699; Font-Family:Arial, Helvetica;Font-Size:0.75em; Font-Weight:Bold;Text-Decoration:none;}</pre>
PortletText1	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletText1 tag <pre>.PortletText1{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em;}</pre>
PortletHeading2	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletHeading2 tag <pre>.PortletHeading2{Color:#336699; Font-Family:Arial, Helvetica;Font-Size:0.67em; Font-Weight:Bold;}</pre>
PortletText2	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletText2 tag <pre>.PortletText2{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.67em;}</pre>
PortletHeading3	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletHeading3 tag <pre>.PortletHeading3{Color:#336699; Font-Family:Arial, Helvetica;Font-Size:0.58em; Font-Weight:Bold;}</pre>
PortletText3	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletText3 tag <pre>.PortletText3{Color:#000000;Font-Family:Arial, Helvetica;Font-Size:0.58em;Text-Decoration:none;}</pre>

Table E-5 (Cont.) Style Element Classes Associated with Portlets

Style Element	Description
PortletHeading4	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletHeading4 tag .PortletHeading4{Color:#336699; Font-Family:Arial, Helvetica;Font-Size:0.58em; Font-Weight:Bold;}
PortletText4	The color, font face, font size, font style, and font decoration of text in portlets marked with the PortletText4 tag .PortletText4{Color:#000000; Font-Family:Arial, Helvetica;Font-Size:0.58em;}

E.3 Substitution Tags for HTML Content Layouts

You can control the layout and appearance of region content by applying an HTML content layout template. Create the template using a simple portal wizard. Enhance it by inserting substitution tags to stand in for values present in Oracle Portal, such as an item or portlet's associated attributes.

HTML content layouts are selected at the region level. Select a content layout on the Attributes tab of region properties. For more information, see [Section 12.3.2, "Using HTML to Define the Layout and Appearance of Region Content"](#).

Possibly, the two most essential tags are:

- #ITEM.PORTLETCONTENT.VALUE#
This tag stands in for a portlet. For portlets to display in a region that is formatted with an HTML content layout template, this tag must be included in the template.
- #ITEM.CONTENT.VALUE#
This tag stands in for item content. For items to display in a region that is formatted with an HTML content layout template, this tag must be included in the template.

You will find descriptions and usage examples for both of these tags in [Table E-6](#).

You have the option of using PL/SQL between <oracle></oracle> tags to allow for a more conditional template, such as one that can be used equally on a portlet or item region. For example:

```
<oracle>
  if #ITEM.TYPE# in ('baseportletinstance', 'portlet_instance') then
    http.p('#ITEM.PORTLETCONTENT#');
  else
    http.p('#ITEM.DESCRPTION#');
    http.p('#ITEM.CONTENT#');
  end if;
</oracle>
```

Within the Oracle Portal user interface, the list of substitution tags displays dynamically. That is, each time the list is invoked (by clicking the **View a list of available tags** link on the Create or Edit Template page), it is assembled on the fly from the tags currently available in the Oracle Portal database. Each substitution tag has its equivalent attribute in Oracle Portal. All item and portlet attributes are

represented. This includes built-in attributes from the Shared Objects page group and custom attributes from the current page group.

For a tag to return a value, its corresponding attribute must contain a value in the portal. For example, for an #ITEM.DESCRPTION.VALUE# tag to return a description of an item, a user must have added a description for that item when the item was added to or edited in the portal.

For more information about HTML content layouts, see [Chapter 12, "Providing a Standard Look and Feel"](#).

[Table E-6](#) lists and describes the substitution tags you can use in HTML content layout templates. The Type column indicates whether the tag can be used with portlets and items (**Common**), only items (**Item**), or only portlets (**Portlet**).

Table E-6 HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.ID#	Common	<p>The ID of an item that is rendered through the HTML content layout template</p> <p>When items have multiple versions, this tag refers to a specific item version. Compare it with #item.masterid#, which is the ID of the item without regard to version. The #item.id# is different for each version. The #item.masterid# is the same for all versions of the item.</p>
#ITEM.MASTERID#	Common	<p>The master ID of an item that is rendered through the HTML content layout template</p> <p>Compare this with #item.id#, which is the ID of a specific version of an item. See #item.id# for more information.</p> <p>This tag can be used with the #item.pagegroupid# tag in a query against the public view of a page. In the following example, assume that the privilege to view WWSBR_ALL_ITEMS is granted to the user or to PUBLIC:</p> <pre><oracle> begin http.p('Item MasterID=#item.masterid#'); http.br; http.p('PageGroup=#item.pagegroupid#'); http.br; for c1 in (select id, display_name, language from #owner#.WWSBR_ALL_ITEMS where masterid = #item.masterid# and caid = #item.pagegroupid#) loop http.p('Item ID = ' c1.id ' title = ' c1.display_name ' language = ' c1.language); http.br; end loop; end; </oracle></pre>
#ITEM.PAGEGROUPID#	Common	<p>The ID of the page group that contains the item being rendered through the HTML content layout template</p> <p>See the example in #item.masterid#.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.TYPE#	Common	<p>The type of the object, such as <i>File</i></p> <p>Possible values can be queried from the NAME column in WWSBR_ITEM_TYPES.</p> <p>For a list of built-in item types, see "Built-In Item Types" following this table.</p> <p>Consider using this tag inside <oracle></oracle> tags to create a conditional entry. For example:</p> <pre><oracle> if #ITEM.TYPE# in ('baseportletinstance', 'portlet_instance') then http.p('#ITEM.PORTLETCONTENT#'); else http.p('#ITEM.DESCRPTION#'); http.p('#ITEM.CONTENT#'); end if; </oracle></pre>
#ITEM.STATUS#	Common	<p>The status of the object</p> <p>Values include:</p> <ul style="list-style-type: none"> ▪ Active ▪ Expired ▪ Deleted ▪ Hidden ▪ Draft ▪ Pending ▪ Rejected <p>A single tag can return multiple values (separated by a space), for example:</p> <pre>Expired Hidden Deleted Expired Hidden</pre> <p>Consider using this tag inside <oracle></oracle> tags, for example, in <i>if</i> statements. See the text that follows this table for a usage sample of the <oracle></oracle> tags.</p> <p>For information on which items are accessible in what states, see Section 17.9.3, "Item URL Security".</p>
#ITEM.STATUSINHTML#	Common	<p>The item status value in the language specified for the client browser</p> <p>The value is returned formatted as highlighted bold. It is rendered only when the page is in Edit mode.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.STATUSLINK#	Common	<p>A fully formed hyperlink leading to the proper action for pending or draft items</p> <p>This link displays only when the object's status is <i>Pending</i> or <i>Draft</i>.</p> <ul style="list-style-type: none"> Clicking a <i>Draft</i> link takes users to an action page where they can either delete the object or submit it for approval. Clicking a <i>Pending</i> link takes users to the Approval Notification Details page. This page contains a link to the item, a summary of attribute values (both displayed and not displayed), a text box for the approver's comments, and the object's approval history.
#ITEM.DISPLAYOPTION#	Common	<p>The object's display option:</p> <ul style="list-style-type: none"> direct—directly on the page link—as a link on the page, link opens in current browser window linktonewwindow—as a link on the page, link opens in new browser window <p>You can use <code><oracle></oracle></code> tags to set up a condition that displays the object as specified in the object's attributes—in the current browser window or a new browser window—should this vary from object to object.</p> <p>For example:</p> <pre> <oracle> begin if '#item.displayoption#' = 'link' then http.p('View item in current window'); elsif '#item.displayoption#' = 'linktonewwindow' then http.p('View item in new window'); else http.p('Display item directly in page'); http.br; http.p('#item.content#'); end if; end; </oracle> </pre>
#ITEM.URL#	Common	<p>The object's path-based URL</p> <p>Use this tag in an HTML href tag. For example:</p> <pre>#item.title.value#</pre> <p>Or</p> <pre></pre>
#ITEM.DURABLEURL#	Common	<p>The object's durable (or graphical user interface ID-based) URL</p> <p>Use this tag in an HTML href tag. For example:</p> <pre>#item.content.label#</pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.EDITURL#	Common	The URL to an edit view of the object This tag renders only for users with the appropriate privilege. Use it in an HTML href tag. For example: <code>Edit</code>
#ITEM.EDITLINK#	Common	The fully-formed hyperlink to an edit view of the object Only users with edit privileges on the item will see this link. Users who click this link are taken to the object's properties page. This tag renders the HTML to form the link as well as the link label, <i>Edit</i> . No additional encoding, such as an href tag, is required.
#ITEM.DELETEURL#	Common	The URL to a delete view of the object This tag renders only for users with the appropriate privilege. Use it in an HTML href tag. For example: <code>Delete</code>
#ITEM.DELETELINK#	Common	The fully-formed hyperlink to a delete view of the object Only users with delete privileges on the item see this link. Users who click this link are taken to a decision page where they choose either Yes or No to continue with deleting the relevant object. This tag renders the HTML to form the link as well as the link label, <i>Delete</i> . No additional encoding, such as an href tag, is required.
#ITEM.PAGENAME#	Common	The name of the object's host page
#ITEM.PAGEURL#	Common	The path-based URL of the object's host page Use this tag in an HTML href tag. For example: <code>#item.pagename#</code>
#ITEM.PAGEDURABLEURL#	Common	The durable (or graphical user interface ID-based) URL of the object's host page Use this tag in an HTML href tag. For example: <code> #item.pagename#</code>
#ITEM.TITLE#	Common	The object's title or Display Name wrapped in its associated style This tag is equivalent to: <code> #item.title.value# </code>
#ITEM.TITLE.LABEL#	Common	<i>Display Name</i>
#ITEM.TITLE.VALUE#	Common	The Display Name of the object

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.TITLE.STYLE#	Common	The style applied to the Display Name of the object Note: Use this tag inside a tag. For example: #item.title.label#:#item.title.value#
#ITEM.DESCRPTION#	Common	The Description of the object wrapped in its associated style This tag is equivalent to: #item.description.value#
#ITEM.DESCRPTION.LABEL#	Common	<i>Description</i>
#ITEM.DESCRPTION.VALUE#	Common	The Description of the object
#ITEM.DESCRPTION.STYLE#	Common	The style applied to the Description Note: Use this tag inside a tag. For example: #item.description.label#:#item.description.value#
#ITEM.AUTHOR#	Common	The object's Author wrapped in its associated style This tag is equivalent to: #item.author.value#
#ITEM.AUTHOR.LABEL#	Common	<i>Author</i>
#ITEM.AUTHOR.VALUE#	Common	The object's Author
#ITEM.AUTHOR.STYLE#	Common	The style applied to the name of the object's Author Note: Use this tag inside a tag. For example: #item.author.label#:#item.author.value#
#ITEM.IMAGE#	Common	The object's representative image with ALT text, aligned as specified in the portal Note: This is the image selected by a user to represent the object, rather than an item of the <i>Image</i> type. This tag is equivalent to, for example:
#ITEM.IMAGE.LABEL#	Common	<i>Image</i>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.IMAGE.VALUE#	Common	<p>The URL leading to the uploaded image (a location within the portal)</p> <p>Note: This is the image selected by a user to represent the object, rather than an item of the Image type. Use this tag in an HTML <code>img src</code> tag. For example:</p> <pre></pre> <p>When used within an <code>img src</code> tag, the image is rendered in place. Otherwise, this tag renders a URL.</p>
#ITEM.KEYWORDS#	Common	<p>The object's assigned keywords and the Keywords label wrapped in their associated style</p> <p>This tag is equivalent to:</p> <pre> #item.keywords.label#: #item.keywords.value# </pre>
#ITEM.KEYWORDS.LABEL#	Common	<i>Keywords</i>
#ITEM.KEYWORDS.VALUE#	Common	The object's assigned keywords
#ITEM.KEYWORDS.STYLE#	Common	<p>The style applied to the object's keywords</p> <p>Note: Use this tag inside a <code></code> tag. For example:</p> <pre> #item.keywords.label#: #item.keywords.value# </pre>
#ITEM.CREATOR#	Common	<p>The user name of the object's creator, labeled and wrapped in its associated style</p> <p>This tag is equivalent to:</p> <pre> #item.creator.label#: #item.creator.value# </pre>
#ITEM.CREATOR.LABEL#	Common	<i>Creator</i>
#ITEM.CREATOR.VALUE#	Common	The user name of the object creator
#ITEM.CREATOR.STYLE#	Common	<p>The style applied to the object creator's user name</p> <p>Note: Use this tag inside a <code></code> tag. For example:</p> <pre> #item.creator.label#: #item.creator.value# </pre>
#ITEM.CREATEDATE#	Common	<p>The object's create date, labeled and wrapped in its associated style</p> <p>This tag is equivalent to:</p> <pre> #item.createdate.label#: #item.createdate.value# </pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.CREATEDATE.LABEL#	Common	<i>Create Date</i>
#ITEM.CREATEDATE.VALUE#	Common	The string value equal to the date the object was created (that is, the date it was uploaded to the portal) Note: This tag uses the format: DD-MON-YYYY, that is, 06-MAY-2004
#ITEM.CREATEDATE.STYLE#	Common	The style applied to the object's create date Note: Use this tag inside a tag. For example: #item.createdate.label#: #item.createdate.value#
#ITEM.TRANSLATIONS#	Common	The fully-formed hyperlink to a translation If no translation is present, the link does not display.
#ITEM.TRANSLATIONS.LABEL#	Common	<i>Translations</i> Use this tag in conjunction with the VALUE tag to render a fully-formed link to a list of translations of the current item. For example: #item.translations.label#
#ITEM.TRANSLATIONS.VALUE#	Common	The URL leading to the object's translation (a location within the portal) if such a translation exists Use this tag in an HTML href tag. For example: #item.translations.label# In contrast to the #ITEM.TRANSLATIONS# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if no translation is present; in which case, users will receive an HTML error message when they click the link.

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.TRANSLATIONS.IMAGE#	Common	<p>The translations icon:</p>  <p>You can use this tag in conjunction with the #item.translations.value# and #item.translations.label# tags to link the translations icon to a URL that dynamically assembles a page that lists links to all translations of this object in the portal.</p> <p>For example:</p> <pre> </pre> <p>This tag must be placed in an tag to render properly:</p> <pre></pre>
#ITEM.NEWFLAG#	Common	<p>The fully-formed hyperlink to a page listing all new objects</p> <p>If the object does not fall within the time limit specified for new objects, the link does not display. For example, if the page group is configured to flag objects as new for three days after they are uploaded, and the current object was uploaded seven days ago, the object is no longer considered new, and the link no longer displays next to the object.</p>
#ITEM.NEWFLAG.LABEL#	Common	<i>New Items</i>
#ITEM.NEWFLAG.VALUE#	Common	<p>The URL that renders a page that lists hyperlinks to all objects labeled <i>New Items</i></p> <p>What qualifies as new is configured at the page group level on the page group properties Items tab.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.newflag.label#</pre> <p>In contrast to the #ITEM.NEWFLAG# this tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if no objects fall within the New Flag time limit; in which case, users will receive an HTML error message when they click the link.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.NEWFLAG.IMAGE#	Common	<p>The New Items icon:</p> <p></p> <p>You can use this tag in conjunction with the #item.newflag.value# and #item.newflag.label# tags to link the new objects icon to a URL that dynamically assembles a page that lists links to all new objects in the portal to which the user has access privileges.</p> <p>For example:</p> <pre> </pre> <p>This tag must be placed in an tag to render properly:</p> <pre></pre>
#ITEM.PERSPECTIVES#	Common	<p>All perspectives applied to the object, listed as HTML links, which, when clicked, return a search result of all objects sharing the same perspective</p> <p>This tag renders the same information as the tag #ITEM.PERSPECTIVES.VALUE#.</p>
#ITEM.PERSPECTIVES.LABEL#	Common	<i>Perspectives</i>
#ITEM.PERSPECTIVES.VALUE#	Common	All perspectives applied to the object, listed as HTML links, which, when clicked, return a search result of all objects sharing the same perspective
#ITEM.PERSPECTIVES[n]#	Common	<p>The fully-formed hyperlink to a page that lists links to all objects that are classified under the specified perspective</p> <p>If the relevant perspective has not been applied to the object, the link does not display.</p>
#ITEM.PERSPECTIVES[n].LABEL	Common	<p>The display name of the <i>n</i>th perspective</p> <p>Use this tag in conjunction with the #ITEM.PERSPECTIVES[n].VALUE# tag to render the targeted perspective. For example:</p> <pre> #item.perspectives2.label#</pre> <p>This construction will list the second perspective in the list of perspectives associated with the object. The perspective will display as a link, which, when clicked, will return a search result of all objects sharing the same perspective.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.PERSPECTIVES[n].VALUE#	Common	<p>The URL that renders the value of the <i>n</i>th perspective in the list of perspectives applied to the object.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre data-bbox="781 369 1235 426"> #item.perspectives2.label#</pre> <p>In contrast to the #ITEM.PERSPECTIVES[n]# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if no <i>n</i>th perspective is present. In such a case, users receive an HTML error message when they click the link.</p>
#ITEM.PERSPECTIVES[n].STYLE#	Common	<p>The style applied to the object's perspective attribute</p> <p>Use this tag inside a tag. For example:</p> <pre data-bbox="781 722 1284 835"> #item.perspectives4.label# </pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.PERSPECTIVES[n].IMAGE#	Common	<p>The icon image that is associated with a perspective</p> <p>The value [n] refers to the perspective's position on the list of perspectives that are selected for the object. If the object has only one perspective, the value is 1.</p> <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.perspectives[n].value# and #item.perspectives[n].label# tags to set up a linked image. Users click the image to go to a page that lists links to all objects classified by the specified perspective.</p> <p>For example:</p> <pre> </pre> <p>If every perspective in a page group does not have a related perspective icon, you can set up a conditional statement using <oracle></oracle> tags and PL/SQL that renders the icon when it is present and prevents attempts at rendering when it is not present.</p> <p>For example:</p> <pre><oracle> if length('#item.perspectives1.image#') > 0 then http.p(' '); else http.p(' #item.perspectives1.label#'); end if; </oracle></pre>
#ITEM.PROPERTYSHEET#	Common	The fully-formed hyperlink to the object's property sheet
#ITEM.PROPERTYSHEET.LABEL#	Common	<i>Property Sheet</i>
#ITEM.PROPERTYSHEET.VALUE#	Common	<p>The URL that renders the object's property sheet</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.propertysheet.label#</pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.PROPERTYSHEET.IMAGE#	Common	<p>The property sheet icon:</p>  <p>The icon that this tag renders depends on the type of object the property sheet describes.</p> <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.propertysheet.value# and #item.propertysheet.label# tags to link to the object's property sheet.</p> <p>For example:</p> <pre> </pre>
#ITEM.UPDATEDFLAG#	Common	<p>The fully-formed hyperlink to a page that lists links to all recently updated objects</p> <p>If no objects have been updated recently, the link does not display.</p>
#ITEM.UPDATEDFLAG.LABEL#	Common	<i>Recently Updated Items</i>
#ITEM.UPDATEDFLAG.VALUE#	Common	<p>The URL that renders a page that contains a linked list of all newly updated objects</p> <p>What qualifies as a newly updated object is configured at the page group level on the page group properties Items tab.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.updatedflag.label#</pre> <p>In contrast to the #ITEM.UPDATEDFLAG# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if no object has been updated within the specified period; in which case, users will receive an HTML error message when they click the link.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.UPDATEDFLAG.IMAGE#	Common	<p>The Recently Updated Items icon:</p>  <p>You can use this tag in conjunction with the #item.updatedflag.value# and #item.updatedflag.label# tags to link the updated icon to a URL that dynamically assembles a page that lists links to all updated objects in the portal to which the user has access privileges.</p> <p>For example:</p> <pre> </pre> <p>Used alone, this tag must be placed in an tag to render properly:</p> <pre></pre>
#ITEM.ITEMFUNCTION#	Common	<p>A URL that renders a page listing hyperlinks to all functions associated with the object</p> <p>This tag renders the same information as the tag #ITEM.ITEMFUNCTION.VALUE#.</p>
#ITEM.ITEMFUNCTION.LABEL#	Common	<i>Associated Functions</i>
#ITEM.ITEMFUNCTION.VALUE#	Common	A URL that renders a page listing hyperlinks to all functions associated with the object
#ITEM.ITEMFUNCTION[n]#	Common	<p>A fully-formed link to the <i>n</i>th function associated with the object</p> <p>If the object does not have an <i>n</i>th associated function, the link does not display.</p>
#ITEM.ITEMFUNCTION[n].LABEL#	Common	The display name of the <i>n</i> th function
#ITEM.ITEMFUNCTION[n].VALUE#	Common	<p>In the presence of multiple associated functions, the URL to the function in the <i>n</i>th position on the list of functions associated with the object</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.itemfunction3.label#</pre> <p>This will result in a linked label of the third function associated with the object. Users click the label to perform the related function.</p> <p>In contrast to the #ITEM.ITEMFUNCTION[n]# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if an <i>n</i>th function has not been associated with the object; in which case, users will receive an HTML error message when they click the link.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.ITEMFUNCTION[<i>n</i>].STYLE#	Common	The style associated with the object function Use this tag inside a tag. For example: <pre><a href="#item.function[<i>n</i>].value#"> <font class="#item.function[<i>n</i>].style#"> #item.function[<i>n</i>].label# </pre>
#ITEM.PUBLISHDATE#	Common	The string value of the object's publish date, labeled and wrapped in its associated style This tag is equivalent to: <pre> #item.publishdate.label#: #item.publishdate.value# </pre> Note: This tag uses the format: Publish Date: DD-MON-YYYY HH12:MI PM, that is, Publish Date: 06-MAY-2004 01:45 PM
#ITEM.PUBLISHDATE.LABEL#	Common	<i>Publish Date</i>
#ITEM.PUBLISHDATE.VALUE#	Common	The string value of the object's publish date This tag uses the format: DD-MON-YYYY HH12:MI PM For example: 06-MAY-2004 01:45 PM
#ITEM.PUBLISHDATE.STYLE#	Common	The style applied to the object's publish date Use this tag inside a tag. For example: <pre> #item.publishdate.label#: #item.publishdate.value# </pre>
#ITEM.CATEGORY#	Common	The fully-formed hyperlink to a search results page that links to all objects classified under the relevant category If a category has not been applied to the object, the link does not display.
#ITEM.CATEGORY.LABEL#	Common	The display name of the category assigned to the object
#ITEM.CATEGORY.VALUE#	Common	The URL that renders search results for a search run against the category's display name Use this tag in an HTML href tag. For example: <pre> #item.category.label#</pre> In contrast to the #ITEM.CATEGORY# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if no category has been applied to the object; in which case, users will receive an HTML error message when they click the link.

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.CATEGORY.STYLE#	Common	<p>The style applied to the object's category</p> <p>Use this tag inside a tag. For example:</p> <pre> #item.category.label# </pre>
#ITEM.CATEGORY.IMAGE#	Common	<p>The image associated with a category</p> <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.category.value# and #item.category.label# tags to set up a linked image. Users click the image to go to a page that lists links to all objects classified by the specified category.</p> <p>For example:</p> <pre> </pre> <p>If every category in a page group does not have a related category icon, you can set up a conditional statement using <oracle></oracle> tags and PL/SQL to render the icon when it is present and prevent attempts at rendering when it is not present.</p> <p>For example:</p> <pre><oracle> if length('#item.category.image#') > 0 then http.p(' '); else http.p(' #item.category.label#'); end if; </oracle></pre>
#ITEM.UPDATEDATE#	Common	<p>The string value of the date of the object's latest update, labeled and wrapped in its associated style</p> <p>This tag is equivalent to:</p> <pre> #item.updateddate.label#: #item.updateddate.value# </pre> <p>Note: This tag uses the format:</p> <p>Date Updated: DD-MON-YYYY, that is, Date Updated: 06-MAY-2004</p>
#ITEM.UPDATEDATE.LABEL#	Common	<i>Date Updated</i>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.UPDATEDATE.VALUE#	Common	The string value of the date of the object's latest update This tag uses the format: DD-MON-YYYY, for example, 06-MAY-2004
#ITEM.UPDATEDATE.STYLE#	Common	The style applied to the object's update value Use this tag inside a tag. For example: #item.updatedate.label#: #item.updatedate.value#
#ITEM.UPDATOR#	Common	The username of the user who last updated the object, labeled and wrapped in the associated style This tag is equivalent to: #item.updator.label#: #item.updator.value#
#ITEM.UPDATOR.LABEL#	Common	<i>Last Updated By</i>
#ITEM.UPDATOR.VALUE#	Common	The user name of the user who updated the object
#ITEM.UPDATOR.STYLE#	Common	The style applied to the object updator attribute Use this tag inside a tag. For example: #item.updator.label#: #item.updator.value#
#ITEM.EXPIREDATE.LABEL#	Item	<i>Expire Date</i>
#ITEM.EXPIREDATE.VALUE#	Item	The string value of the date the item will expire This tag uses the format: DD-MON-YYYY HH12:MI PM, for example, 06-MAY-2004 01:45 PM
#ITEM.EXPIREDATE.STYLE#	Item	The style applied to the item's expire date Use this tag inside a tag. For example: #item.expiredate.label#: #item.expiredate.value#
#ITEM.VERSIONS#	Item	The fully-formed hyperlink to a page listing all available versions of the item Item versioning must be enabled for the page group for this hyperlink to display.
#ITEM.VERSIONS.LABEL#	Item	<i>Versions</i>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.VERSIONS.VALUE#	Item	<p>The URL that renders a page that lists hyperlinks to each of the item's versions (a location within the portal), indicates which is the current (displayed) version, shows when the item was last updated, and lists the user who last updated the item</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.versions.label#</pre> <p>In contrast to the #ITEM.VERSIONS# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if versioning is not enabled for the page group; in which case, users will receive an HTML error message when they click the link.</p>
#ITEM.VERSIONS.IMAGE#	Item	<p>The versions icon:</p>  <p>You can use this tag in conjunction with the #item.versions.value# and #item.versions.label# tags to link the versions icon to a URL that dynamically assembles a page that lists links to all versions of the given item.</p> <p>For example:</p> <pre> </pre> <p>This tag must be placed in an tag to render properly:</p> <pre></pre>
#ITEM.DOCUMENTSIZE#	Item	<p>The size of the uploaded file or image item, labeled and wrapped in its associated style</p> <p>This tag is equivalent to:</p> <pre> #item.documentsize.label#: #item.documentsize.value# </pre>
#ITEM.DOCUMENTSIZE.LABEL#	Item	<i>Document Size</i>
#ITEM.DOCUMENTSIZE.VALUE#	Item	The size of the uploaded file or image item
#ITEM.DOCUMENTSIZE.STYLE#	Item	<p>The style applied to the item's document size</p> <p>Use this tag inside a tag. For example:</p> <pre> #item.documentsize.label#: #item.documentsize.value# </pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.VIEWASHTML#	Item	<p>The fully-formed hyperlink to the item displayed as HTML</p> <p>This lets you see binary files with textual content as a Web page. Such files include Microsoft Word documents or Excel spreadsheets.</p> <p>If the item cannot be displayed as HTML, the link does not display.</p>
#ITEM.VIEWASHTML.LABEL#	Item	<i>View as HTML</i>
#ITEM.VIEWASHTML.VALUE#	Item	<p>The URL that renders the file item content as HTML</p> <p>This tag enables you to see binary files with textual content as a Web page. Such files include Microsoft Word documents or Excel spreadsheets.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.viewashtml.label#</pre> <p>In contrast to the #ITEM.VIEWASHTML# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if the item cannot be viewed as HTML; in which case, users will receive an HTML error message when they click the link.</p>
#ITEM.VIEWASHTML.IMAGE#	Item	<p>The View as HTML icon:</p>  <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.viewashtml.value# and #item.viewashtml.label# tags to link to an HTML view of the binary file (that is, the Microsoft Word file, the Excel spreadsheet, and the like).</p> <p>For example:</p> <pre> </pre>
#ITEM.THEMES#	Item	<p>The fully-formed hyperlink to the linguistic themes of the item's content</p> <p>If Oracle Text is not enabled, the link does not display.</p>
#ITEM.THEMES.LABEL#	Item	<p><i>View Themes</i></p> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.THEMES.VALUE#	Item	<p>The URL that renders the linguistic themes of the content</p> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.themes.label#</pre> <p>In contrast to the #ITEM.THEMES# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if Oracle Text is not turned on; in which case, users will receive an HTML error message when they click the link.</p>
#ITEM.THEMES.IMAGE#	Item	<p>The themes icon:</p>  <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.themes.value# and #item.themes.label# tags to link to the item's linguistic themes.</p> <p>For example:</p> <pre> </pre> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>
#ITEM.GIST#	Item	<p>The fully-formed hyperlink to a paragraph summarizing the item's content (its <i>gist</i>)</p> <p>If Oracle Text is not enabled, the link does not display.</p>
#ITEM.GIST.LABEL#	Item	<p><i>View Gist</i></p> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.GIST.VALUE#	Item	<p>The URL that renders a paragraph that summarizes the document</p> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p> <p>Use this tag in an HTML href tag. For example:</p> <pre>#item.gist.label#</pre> <p>In contrast to the #ITEM.GIST# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if Oracle Text is not turned on; in which case, users will receive an HTML error message when they click the link.</p>
#ITEM.GIST.IMAGE#	Item	<p>The gist icon:</p>  <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.gist.value# and #item.gist.label# tags to link to a summary paragraph about the item.</p> <p>For example:</p> <pre> <img src="#item.gist.image#" alt="#item.gist.label#" </pre> <p>This attribute is used in conjunction with a portal search. It displays only if Oracle Text is enabled and only for File and Simple File items, or items of a type based on the Simple File item type.</p>
#ITEM.CONTENT#	Item	<p>The item content</p> <ul style="list-style-type: none"> ■ If the item display option is set to display item content directly on the page, the item content is rendered on the page. ■ If the item display option is set to display as a link, an HTML link, using the item's title or Display Name is rendered on the page. <p>This tag is equivalent to #ITEM.CONTENT.VALUE#.</p>
#ITEM.CONTENT.LABEL#	Item	<p><i>Item Content</i></p> <p>To render the object's display name, use #item.title.value#.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.CONTENT.VALUE#	Item	<p>The item content</p> <p>This tag renders differently for different item types and for each display option, whether content is displayed on the page or as a link on the page:</p> <ul style="list-style-type: none"> ▪ TEXT—On page: The text is rendered; As link: The item's path-based URL is rendered ▪ PL/SQL—On page: The string value from the execution of the PL/SQL code is rendered; As link: The item's path-based URL is rendered ▪ FILE—On page: The file content is rendered; As link: The item's path-based URL is rendered ▪ URL—On page: The content from the URL is rendered; As link: The item's path-based URL is rendered ▪ IMAGE—always displays the image path. You can view the image directly on the page by placing this tag in an <code></code> tag. If other types of items will be included in a region that uses an HTML Content Layout template, you can use <code><oracle></oracle></code> tags to set up a condition that considers the item type and renders the item appropriately. <p>The value displayed in the browser window depends not only on the object type being rendered, but also on the display option that was selected for the object in Oracle Portal. When the link display option is selected, the resulting URL that displays in a region formatted with a Content Layout template is not linked. That is, users cannot click the URL to navigate to the object. To make the URL navigable when an object's display option is set to <i>link</i>, enclose the substitution tag in an HREF tag. This will render a link that users can click to render the object.</p> <p>When an HTML Content Layout template is applied, problems can arise when different objects in the same region have different display option attribute values. See the example following this table for a way to successfully construct a Content Layout template that displays both linked and directly displayed objects in the same region. The example also demonstrates a template that can be applied to both portlet and item regions.</p>
#ITEM.CONTENT.STYLE#	Item	<p>The style applied to the item's label</p> <p>Use this tag inside a <code></code> tag. For example:</p> <pre> #item.content.label# </pre>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.ITEMTYPEICON#	Item	<p>The icon denoting the item's type with ALT text, aligned and sized as specified in the portal</p> <p>This tag is equivalent to, for example:</p> <pre data-bbox="776 369 1300 453"></pre> <p>The conditions that determine which image is rendered include:</p> <ul data-bbox="776 558 1422 642" style="list-style-type: none"> For items that have an associated file of a recognized MIME type, this tag renders an image that identifies the MIME type, for example: <div data-bbox="781 680 821 716" style="text-align: center;">  </div> <p>The recognized MIME types are: doc, exe, gif, html, htm, jpg, peg, pdf, ppt, rtf, txt, wav, xls, zip.</p> <ul data-bbox="776 810 1446 890" style="list-style-type: none"> For other items, this tag renders the image entered for the item type's Image attribute. If no image was provided, the built-in base-type icon is used.
#ITEM.ITEMTYPEICON.LABEL#	Item	<p>The type of item:</p> <p>The conditions that determine which text is rendered include:</p> <ul data-bbox="776 989 1430 1230" style="list-style-type: none"> For items that have an associated file of a recognized MIME type, this tag renders the text that identifies the MIME type, for example, Adobe Portable Document Format. <p>The recognized MIME types are: doc, exe, gif, html, htm, jpg, peg, pdf, ppt, rtf, txt, wav, xls, zip.</p> <ul data-bbox="776 1167 1430 1230" style="list-style-type: none"> For other items, this tag renders the value entered for the item type's Display Name attribute. <p>When the page group is rendered in a language other than its default language, the text is translated automatically when a translation is available in the language. For example:</p> <ul data-bbox="776 1335 1430 1480" style="list-style-type: none"> Translations for recognized MIME types and built-in item types are available. Translation for a custom item type is available when a translation is provided for the item type's Display Name attribute.

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By ...
#ITEM.ITEMTYPEICON.VALUE#	Item	<p>The URL of the image that represents the item type</p> <p>The conditions that determine which image is rendered include:</p> <ul style="list-style-type: none"> For items that have an associated file of a recognized MIME type, this tag renders a URL of an image that identifies the MIME type. The recognized MIME types are: doc, exe, gif, html, htm, jpg, peg, pdf, ppt, rtf, txt, wav, xls, zip. For other items, this tag renders the URL of the image entered for the item type's Image attribute. If no image was provided, the built-in base-type icon is used. <p>You can use two ITEMTYPEICON tags together to render an icon of a standard size and its Alt text. For example:</p> <pre></pre> <p>The WIDTH and HEIGHT values guarantee consistency in the rendered icon's size.</p>
#ITEM.SUBSCRIBE#	Item	<p>A fully-formed subscription link</p> <p>If approvals and notifications are not enabled, the link does not display. Use this tag only when approvals and notifications are enabled for the page group that owns the page where the item is placed.</p>
#ITEM.SUBSCRIBE.LABEL#	Item	<p><i>Subscribe</i> or <i>Unsubscribe</i></p> <p>You can use this tag in conjunction with the #item.subscribe.value# tag to render a subscription or an unsubscribe link. For example:</p> <pre> #item.subscribe.label# </pre> <p>You can also wrap the value tag around your own label text. But keep in mind, all items placed in the same region use whatever static label you enter.</p> <p>Use this tag only when approvals and notifications are enabled for the page group that owns the page where the item is placed.</p> <p>The value that is rendered by this tag depends on the state of the item. If the item is not yet subscribed to, #item.subscribe.label# returns <i>Subscribe</i>. If the item is already subscribed to, #item.subscribe.label# returns <i>Unsubscribe</i>.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.SUBSCRIBE.VALUE#	Item	<p>The URL that enables users to subscribe to an item or the URL that enables users to unsubscribe from an item</p> <p>Use this tag in an HTML href tag. For example:</p> <pre> #item.subscribe.label# </pre> <p>In contrast to the #ITEM.SUBSCRIBE# tag, consider placing the VALUE tag in a PL/SQL conditional statement to control whether it will render. Otherwise, there is a possibility that the link will render even if item subscriptions are not enabled; in which case, users receive an HTML error message when they click the link.</p> <p>Use this tag only when approvals and notifications are enabled for the page group that owns the page where the item is placed.</p> <p>The value that is rendered by this tag depends on the state of the item. If the item is not yet subscribed to, #item.subscribe.value# returns the URL that allows users to subscribe to the item. If the item is already subscribed to, #item.subscribe.value# returns the URL that allows users to unsubscribe from the item.</p>
#ITEM.SUBSCRIBE.IMAGE#	Item	<p>The Subscribe icon:</p>  <p>This tag must be placed in an tag to render properly:</p> <pre></pre> <p>You can use this tag in conjunction with the #item.subscribe.value# and #item.subscribe.label# tags to render the item's subscribe link.</p> <p>For example:</p> <pre> </pre> <p>Once an item is subscribed to, Oracle Portal automatically switches this image to the Unsubscribe icon:</p>  <p>Use this tag only when approvals and notifications are enabled for the page group that owns the page where the item is placed.</p>

Table E-6 (Cont.) HTML Content Layout Substitution Tags

Substitution Tag	Type	Value Set By...
#ITEM.VERSION_NUMBER#	Item	The numeric value that identifies a particular item version, labeled and wrapped in its associated style This tag is equivalent to: #item.version_number.label#: #item.version_number.value#
#ITEM.VERSION_NUMBER.LABEL#	Item	<i>Version Number</i>
#ITEM.VERSION_NUMBER.VALUE#	Item	The numeric value that identifies a particular version
#ITEM.VERSION_NUMBER.STYLE#	Item	The style applied to an item's version number. Use this tag inside a tag. For example: #item.version_number.label#: #item.version_number.value#
#ITEM.[attribute_name].LABEL#	Item	The custom attribute's display name
#ITEM.[attribute_name].VALUE#	Item	The stored value of the custom attribute
#ITEM.[attribute_name].STYLE#	Item	The style applied to the custom attribute Use this tag inside a tag. For example: #item.[attribute name].label#: #item.[attribute name].value#
#ITEM.PORTLETCONTENT#	Portlet	The portlet This tag renders the same content as the #item.portletcontent.value# tag.
#ITEM.PORTLETCONTENT.LABEL#	Portlet	<i>Portlet Content</i> Use the tag #item.title.value# to render the object's display name.
#ITEM.PORTLETCONTENT.VALUE#	Portlet	The portlet For example, If the Favorites portlet is added to a region formatted with an HTML Content Layout containing this tag, this tag will render the Favorites portlet.

Built-In Item Types

Any one of the following values can be returned for the #ITEM.TYPES# substitution tag. These are the item types that are returned from a query on the Name column in the WWSBR_ITEM_TYPES table:

- file
- text
- url
- folderlink

- `plsql`
- `imagemap`
- `none`
- `portlet`
- `zip_file`
- `baseportletinstance`
- `basefile`
- `baseurl`
- `basetext`
- `baseplsql`
- `basepagelink`
- `baseimage`
- `baseportallink`
- `baseloginlogout`
- `basemaplink`
- `tab_item_type`
- `basepagepath`
- `baseimagemap`
- `basesubpagedisplay`
- `basepagefunction`
- `portlet_instance`
- `baseuser`
- `extfile`
- `exturl`
- `exttext`
- `extplsql`
- `basearch`
- `baseelementlist`
- `basesmarttext`
- `extpagelink`
- `extimage`
- `extimagemap`
- `base_placeholder`
- `wirelessurl`
- `baseitemlink`
- `item_link`
- `Oracle_Reports`

E.4 Database Portlet Substitution Tags

Use the tags listed in [Table E-7](#) when you construct Unstructured User Interface templates for database portlets. For more information about templates for database portlets, see [Chapter 12, "Providing a Standard Look and Feel"](#).

Table E-7 Database Portlet Substitution Tags

Substitution Tag	Value Set By...
#BODY#	The database portlet
#OWNER#	The Portal schema that owns the database portlet
#IMAGE_PREFIX#	The Oracle Portal images directory as specified in the <code>plsq1.conf</code> configuration file
#USER#	The user name of the user who is currently logged on
#USER.FULLNAME#	The full name of the user who is currently logged on The full name includes the user's first, middle, and last names.
#USER.FIRSTNAME#	The first name of the user who is currently logged on
#USER.MIDDLENAME#	The middle name of the user who is currently logged on
#USER.LASTNAME#	The last name (surname) of the user who is currently logged on
#VERSION#	The version of this installation of Oracle Portal
#HELPSCRIPT#	The JavaScript function used to open a window to display the Oracle Portal online help If you include #HELPLINK# in your template, you should also include this tag.
#DIRECTION#	The direction of character layout (left-to-right or right-to-left) This value is set based on the language selected for the portal. Use it in conjunction with portals using bi-directional languages. For example, using PL/SQL (between <oracle></oracle> tags), you can set up <i>if</i> statements that query the current text direction and, based on the result, set the alignment of template elements using the #ALIGN_LEFT# and #ALIGN_RIGHT# tags.
#ALIGN_LEFT#	Align content to the left
#ALIGN_RIGHT#	Align content to the right
#TITLE#	The portlet's display name as assigned through the portal #HEADING# and #TITLE# render the same content. One way to use the #title# substitution tag is to pass it as a parameter that tells you the page a user was on when he, for example, clicked your "Contact Us" link. For example: <pre><HEAD> <TITLE>#TITLE#</TITLE> #PAGE.STYLE# #PAGE.BASE# </HEAD> <Body leftMargin="0" rightMargin="0" topMargin="0" marginheight="0" marginwidth="0" class="PageBG"> #BODY# <a href= "http://www.<page_that_takes_URL_Param.com?currPage=#TITLE#">Contact Us </BODY> </HTML></pre>
#HEADING#	The portlet's display name as assigned through the portal #HEADING# and #TITLE# render the same content.

Table E-7 (Cont.) Database Portlet Substitution Tags

Substitution Tag	Value Set By...
#HELPLINK#	Portlet help URL
#HOMELINK#	Portal home URL
#FRAMELINK#	Portlet frame URL

Customizing the Style of Design-Time Dialogs

When you want all of your portal to reflect your enterprise's trademark look and feel, you can use the `uiwizset.sql` script to customize the colors and fonts of the Oracle Portal design-time dialogs, such as the Add Item and Add Portlet screens. The script modifies Oracle Portal user interface style preferences and saves the modifications to the preference store in the Oracle Portal schema.

You will find the `uiwizset.sql` script at the following location:

```
ORACLE_HOME/portal/admin/plsql/wvc/uiwizset.sql
```

The script contains default values for dialog colors and fonts. Before you alter the script, back it up to allow for returning dialogs to their default style values.

The script also contains an explanation for each entry. These will guide you further toward successful use of the script. This appendix includes a few notes to assist with script editing:

- When a style requires a color, use hexadecimal values to specify your color choice. For example:

```
p_font_color => '#FFFFFF'
```

- All styles requiring fonts reference the constant `DEFAULT_FONT` defined near the beginning of the script. Each parameter `p_font_name` references this constant. Enter a string of font choices, separated by commas. Each user's browser will pick the first font on the list that is available on the user's own system.

If you plan to change each `p_font_name` parameter individually, enter a font string in the same format you would use for the constant. For example:

```
p_font_name => 'Arial, Helvetica, Geneva, sans-serif'
```

- When a style requires a font size, specify a numerical value and a unit of measurement. For measurement, use one of the following standard Web font measurement units:
 - **px** fixed unit (pixels, though relative to the viewer's monitor)
 - **pt** fixed unit (points)
 - **em** relative unit (relative to the font size of the last specified font)
 - **ex** relative unit (relative to the "X" size of the last specified font)
 - **%** relative unit (relative to the font size of the last specified font)

For example:

```
p_font_size => '16pt'
```

Use any text editor to edit `uiwizset.sql` to reflect your font and color preferences. Then run the script, for example, in SQL Plus, against the Oracle Portal schema.

Because the style sheet is expiry-based cached, you must wait 24 hours for the cache to expire automatically and your changes to display. If you are testing your design on a pre-production version of your portal, you can take the following steps to display applied script changes immediately:

Note: With the following steps, the cache is being cleared. When cache is cleared, the performance of the portal may be impacted. If performance is a concern, the following steps should be performed during off-peak hours.

- Clear the Portal Cache on each midtier used to access your portal:
 1. Navigate to the portal cache directory.
The default path is `ORACLE_HOME/Apache/modplsql/cache`.
 2. Perform a recursive delete of all the files under this directory.
For example, on UNIX platforms, issue the following command:

```
rm -rf plsql/sys/*
```

Warning: Ensure that you are in the correct directory before issuing this command. Do not delete the `cache` directory. For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*.

- Clear all Web Caches that are used to access your portal. For information on clearing Web Cache, see *Oracle Fusion Middleware Administrator's Guide for Oracle Web Cache*
- If, after clearing these caches, the changes do not display in your browser, reload the browser page. To reload, click your browser's **Refresh** button, or **Reload current page** button, or whichever variation of this button your browser uses.

Glossary

About mode

An optional **portlet Show mode** that displays information about the portlet's copyright, version, and author.

access control list

See **ACL**.

ACL

Access Control List. A list of groups and users authorized for specific access to an **object**.

add-in

See **extension**.

advanced search

A search engine that enables users to:

- Find content that contains any or all terms in the search string.
- Search selected **page groups**, or search across all page groups.
- Restrict a search to a particular **page**, **category**, **perspective**, **item type**, or **attribute**.

If **Oracle Text** is installed and enabled, all text attributes and the actual content of documents and URLs are searched. If Oracle Text is not installed, or is disabled, the following **metadata** is searched: item attributes (Display Name, Description, Keywords, and Author), page attributes (Display Name, Description, and Keywords) and category/perspective attributes (Display Name and Description).

If Oracle Text is installed and enabled, you can also use advanced search to perform near, soundex, and fuzzy searches.

See also **search portlet**. Contrast with **basic search** and **custom search**.

API

Application Programming Interface. A set of exposed data structures and functions that an application can use to invoke services on a portal **object**, such as a **portlet**, **page**, or **page group**. Note that Oracle Portal APIs are exposed through the **PDK** available from the Oracle Portal Developer Kit (PDK) page on OTN:

<http://www.oracle.com/technology/products/ias/portal/pdk.html>

Application Programming Interface

See [API](#).

Application Service Provider

See [ASP](#).

approval notification

A message in the Notification portlet indicating that a user whose content requires approval has created or updated an [item](#). The intended recipients of approval notifications ([approvers](#)) relating to a particular page group or page are identified in an [approval process](#). An approver may respond to the notification by approving or rejecting the item in question.

approval process

A series of one or more steps that determines which users (or [groups](#)) need to review content that requires approval before it can be published. Each step in an approval process must have one or more [approvers](#). Routing to the approvers can be in serial (one at a time) or in parallel (all at once), and each step can be defined to require a response (either an approval or a rejection) by any one member or by all members. Once the required number of responses is received during a step, the process continues to the next step. The process ends when the item is rejected, or the final step is reached and the document is approved.

approver

A user identified in a page group or page [approval process](#), either explicitly or implicitly through group membership, as someone who needs to review content that requires approval before it can be published. An approver may choose to approve or reject such content.

ASP

Application Service Provider. A service that provides remote hosting of applications, maintaining and operating the hardware, software, and other resources required to run the applications. A good example is Oracle Portal Online, a hosted subscription service that provides the features of Oracle Portal to smaller businesses and organizations who want to build [portals](#) but do not have the resources in-house to build and manage them.

attribute

A portal [object](#) that stores information (or [metadata](#)) about an [item](#) or [page](#): for example, Create Date, Expire Date, or Author. A [page group administrator](#) can create custom attributes to extend the functionality of [item types](#) and [page types](#). For example, a base attribute on a file is Display Name; a custom attribute might be a check box to indicate whether the file is confidential. Custom attributes are useful for assigning unique, searchable identifiers to items.

authenticated user

A user who is logged on to a [portal](#). By default, authenticated users can access and, based on privileges granted to the user, act on certain portal [objects](#), such as [pages](#).

Contrast with [public users](#), who can access public content only.

authorization

The evaluation of security constraints to send a message or make a request. Authorization uses specific criteria—authentication and restriction—to determine whether the request should be permitted.

authorized user

See [authenticated user](#).

banner

See [region banner](#). See also [navigation page](#).

base attribute

See [attribute](#).

base item type

See [item type](#).

base page type

See [page type](#).

basic search

A search engine that enables users to find content that contains a specific search string.

If [Oracle Text](#) is installed and enabled, all text [attributes](#) and the actual content of documents and URLs are searched. If Oracle Text is not installed, or is disabled, the following [metadata](#) is searched: item attributes (Display Name, Description, Keywords, and Author), page attributes (Display Name, Description, and Keywords) and category/perspective attributes (Display Name and Description).

See also [search portlet](#). Contrast with [advanced search](#) and [custom search](#).

basic search box item

A navigation item that users can add to a [page](#) to enable other users to perform basic searches. The search box can initiate a search of all [page groups](#) or a specified subset of page groups.

batch job

The process of running a [Portlet Builder portlet](#) in the background using the Oracle Portal batch job facility. An end user can run a portlet in batch mode by selecting options on the portlet's [personalization form](#). Batch processing is useful if the portlet is based on a large amount of data, if the portlet displays many rows of data, or if the job may take a long time to run.

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. Portlet developers typically use bind variables (for example, dept) to display a [parameter entry field](#) in a [portlet's personalization form](#). The entry field enables end users to choose the data that the portlet will display.

bookmark

See [favorite](#).

breadcrumbs

See [page path item](#).

Builder page

See [Portal Builder page](#).

bulk load

See [zip file item](#).

caching

The act of storing frequently accessed information, typically Web pages or [portlets](#) in Oracle Portal, in a location where it can be accessed quickly to avoid frequent content generation. For example, [Oracle Web Cache](#) stores dynamically-generated portlets in its memory, then serves them to the [PPE](#) when there is a request for the specified portlet. This storage reduces the total time spent handling the request by avoiding connections to the back-end database and other Web sites.

See also [expiry-based caching](#), [invalidation-based caching](#), [system level caching](#), [user level caching](#), and [validation-based caching](#).

calendar

A [portlet](#) created with the [Portlet Builder](#) that displays the results of a SQL [query](#) in calendar format.

call interface

The call interface displays the arguments that were selected when a [Portlet Builder portlet](#) was originally created or last edited.

category

A predefined [attribute](#) used to group or classify [pages](#), [items](#), and [portlets](#) in a [page group](#). A category helps users answer the question: *What is this item or page?* For example, in a travel page group, you might have categories for maps, snapshots, and hotel reviews. Users can assign only one category to a particular item or page.

See also [perspective](#).

chart

A [portlet](#) created with the [Portlet Builder](#) that displays the results of a SQL [query](#) as a chart, such as a bar chart, pie chart, or line chart. Bar 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 out/check in

A mechanism that allows a user to lock an item, by checking it out, so that other users cannot edit that same item. This prevents users from overwriting each others changes. After editing the item, the user releases it by checking it back in, making it available again for other users to edit.

child object

An object that is part of a hierarchy. For example, sub-pages, sub-categories, and sub-perspectives are child objects of a [page](#), [category](#), and [perspective](#) respectively.

See also [manifest](#).

child page

In **Oracle Instant Portal**, a page created beneath a **top-level page**. Child pages are listed along the left side of the top-level page to which they belong, in the **navigation area**, and usually support the top-level page's main theme. You can add, delete, re-position, or edit child pages right in the navigation area, assuming you have the appropriate privileges.

CHTML

Compact HTML. A subset of **HTML** recommendations, designed for small devices.

classification

Categories and perspectives are used to classify the content of a **page** or **item** so that it is easy for users to locate that content during a search.

See also **category** and **perspective**.

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 a disk.

community

See **Portal Community**.

compact HTML

See **CHTML**.

content area

In **Oracle Instant Portal**, refers to the area in which a **page's items** (or content) appear, on the right side of the screen.

content contributor

A user who has the appropriate privileges to add **items** to a **page**. Appropriate page privileges include *Manage Content* and *Manage Items With Approval*. Appropriate item privileges include *Manage*, *Edit*, and *View*.

content item type

A means of classifying the actual content of an **item** that is being uploaded to a **page**, such as a document, text, or an image.

Built-in content item types are:

- **file item** and **simple file item**
- **text item** and **simple text item**
- **URL item** and **simple URL item**
- **image item** and **simple image item**
- **image map item**
- **PL/SQL item** and **simple PL/SQL item**
- **page link item** and **simple page link item**
- **zip file item**

See also **item type**. Contrast with **navigation item type**.

content repository

The Oracle Portal schema within the [Oracle Metadata Repository](#) that contains the content and [metadata](#) associated with a particular portal instance.

Contribute privileges

A privilege level on an [Oracle Instant Portal](#) page that allows the user to add, edit, move, or delete items on the page. A user with Contribute privileges also has all [View privileges](#).

CSS

Cascading Style Sheet. A simple mechanism for adding style, such as fonts, colors, and spacing, to Web documents.

current version

The version of an [item](#) that is displayed on the [page](#). The current version is not necessarily the most recent version of the item.

See also [versioning](#).

custom attribute

See [attribute](#).

custom item type

See [item type](#).

custom page type

See [page type](#).

custom provider

A type of [provider](#) that enables you to create and maintain [portlets](#) that access customer-specific content or applications. You can build custom portlets in Oracle Portal either declaratively or programmatically.

custom search

A search engine that enables users to define a variety of searches against information stored in the Oracle Portal schema of the [Oracle Metadata Repository](#). By editing the defaults of the Custom Search portlet, you can define unique search forms and search results pages that meet the specific search requirements, or configure portlets that execute and return results based on predefined search criteria.

If [Oracle Text](#) is installed and enabled, all text attributes and the actual content of documents and URLs are searched. If Oracle Text is not installed, or is disabled, the following [metadata](#) is searched: item attributes (Display Name, Description, Keywords, and Author), page attributes (Display Name, Description, and Keywords) and category/perspective attributes (Display Name and Description).

See also [search portlet](#). Contrast with [advanced search](#) and [basic search](#).

DAD

Database Access Descriptor. A set of values that specify how an application connects to an Oracle database to fulfill an HTTP request. The information in the DAD includes the user name (which also specifies the schema and the privileges), password, connect-string, error log file, standard error message, and Globalization Support parameters such as language, date format, date language, and currency.

Database Access Descriptor

See [DAD](#).

database administrator

See [DBA](#).

database object

See [object](#).

database provider

A type of [provider](#) that is written as a PL/SQL [stored procedure](#) and is used to create [portlet](#)s that reside in the database. One example of a database provider is a provider built using the [Portlet Builder](#) to provide form, report, and chart portlets.

Contrast with [Web provider](#).

data portlet

A [portlet](#) built using the [Portlet Builder](#) that displays data in a spreadsheet format.

DAV

See [WebDAV](#).

DBA

Database Administrator. A user belonging to the DBA [group](#). By default, members in the DBA group have access to all Oracle Portal product pages, and have the Manage privilege for all [pages](#), [page groups](#), [database providers](#), and administration.

default language

The language in which a [page group](#) is originally created. After creating the page group, you can add [translations](#) to it to enable users to add content in different languages.

default subscriber

The base [subscriber](#) that is installed along with the install of Oracle Portal.

de-militarized zone

See [DMZ](#).

developer

A user who builds [portlet](#)s for others to include on their pages. Relies heavily on the APIs to extend the capabilities of Oracle Portal; may frequently consult the [Portal Knowledge Exchange](#) or the forums for advice or inspiration.

Developer Services

See [Portal Developer Services](#).

DIP

Directory Integration Platform. The provisioning platform provided by [OID](#) to synchronize different directories and directory enabled applications.

direct access URL

Obsolete terminology. See [path-based URL](#).

Directory Information Tree

See [DIT](#).

Directory Integration Platform

See [DIP](#).

display name

An **object**'s external name used throughout Oracle Portal, for example, in the [Navigator](#), on [pages](#), and in the page editor. When the object is published as a **portlet**, the display name is used as the title of the portlet in the [Portlet Repository](#).

Distinguished Name

See [DN](#).

DIT

Directory Information Tree. A hierarchical tree-like structure in **OID** consisting of the **DN**s of the entries.

DN

Distinguished Name. The unique name of a directory entry in **OID**. It includes all the individual names of the parent entries back to the root. The DN tells you exactly where the entry resides in the directory's hierarchy. This hierarchy is represented by a directory information tree ([DIT](#)).

DMZ

De-militarized Zone. A computer host or small network inserted as a "neutral zone" between a company's private network and the outside public network. It prevents outside users from getting direct access to a server that has company data. A DMZ is an optional and more secure approach to a [firewall](#) and effectively acts as a [proxy server](#) as well. (The term comes from the geographic buffer zone that was set up between North Korea and South Korea following the UN police action in the early 1950s.)

document control

See [check out/check in](#).

draft item

An **item** that has been added to a [page](#) but has not yet been submitted for approval. In [View mode](#), a draft item is visible only to its author. When a draft item is ready for approval, the author can submit it, at which point the [approval process](#) is triggered. Draft items can be added to a page only if approvals are enabled for the [page group](#).

durable URL

A URL that uses the item's GUID (globally unique ID) to uniquely identify it. An item's GUID does not change so its durable URL will not break when the item is edited, renamed, moved, or imported to a different portal instance.

Contrast with [path-based URL](#).

dynamic page

A [portlet](#) created with the [Portlet Builder](#) that displays dynamic content on a page. The dynamic page wizard enables you to specify one or many PL/SQL blocks within HTML code to create a page. This code executes every time an end user requests the page.

dynamic URL

A URL that contains a query string (one or more parameters and the characters ? and &).

Contrast with [path-based URL](#)

edge side includes

See [ESI](#).

Edit Defaults mode

An optional [portlet Show mode](#) that enables administrators to set the defaults of a portlet for all users.

Contrast with [Edit mode](#).

Edit mode

1. Page editing: Edit mode enables an authenticated user with appropriate privileges to set [page](#) properties and to add, modify, or delete [portlet](#)s and [item](#)s on the page. To switch to Edit mode, the user clicks an **Edit** link on the page. There are three Edit mode views: [Graphical view](#), [Layout view](#), and [List view](#).

See also [Mobile Preview mode](#) and [Pending Items Preview mode](#).

2. Portlets: An optional portlet [Show mode](#) that enables personalization of the portlet on a per user, per instance basis.

Contrast with [Edit Defaults mode](#).

3. **Oracle Instant Portal**: Opposite of [View mode](#). When the [Edit mode handle bar](#) is clicked, thus displaying the edit toolbar and the Add Item and Add Page buttons, the page is said to be in Edit mode. This is the only state in which action may be taken upon the page.

Edit mode handle bar

In [Oracle Instant Portal](#), the gray icon that one clicks to display the edit toolbar. When the edit toolbar is displayed, the page is in Edit mode. Users with View privileges on the page do not see the Edit mode handle bar.

email item

In [Oracle Instant Portal](#), an item represented by a yellow envelope and, optionally, a title on the page. When the user clicks the envelope, an email editor is opened displaying a blank email. The email is pre-populated with the address specified by the item's creator.

Oracle Enterprise Manager

Oracle Enterprise Manager is a component of the Oracle Fusion Middleware that enables administrators to manage Oracle Fusion Middleware services through a single environment. For example, an administrator can use Oracle Enterprise Manager to monitor the services that make up an Oracle Portal instance, including [HTTP](#) services, the [PPE](#), the Oracle database, [providers](#), and [Oracle Ultra Search](#).

enterprise portal

A common, integrated starting point that provides personalized access to relevant enterprise information sources. Enterprise portals enable site visitors to personalize their view of the resources available on the public Internet.

ESI

Edge Side Includes. A markup language to enable partial page caching (**PPC**) of HTML fragments.

event

An action within a portal triggers a corresponding event. Page designers can specify what should happen when these events occur, for example, by specifying that a particular event forces the reloading of the current **page**, and passes **parameters** to the newly loaded page.

Event servlet

The Event servlet implements the functionality of Oracle Portal to allow for dynamic page navigation when accessing an event enabled **portlet**. The Event servlet runs in the same container as the **PPE**.

expandable rich text item

In **Oracle Instant Portal**, a type of text item designed to conserve space on the page. When in **View mode**, an expandable rich text item is represented by a white envelope, a title, and a summary. When the user clicks the envelope, the item expands to reveal the text associated with the item. Compare to a **rich text item**, in which the full text of the item is never hidden. Both expandable rich text and rich text items may contain images, hyperlinks, and tables, as well as any valid HTML code.

expiration period

The number of days after which, or an exact date on which, an **item** expires. After an item expires, it is viewable only by the item's or **page**'s owner and the **page group administrator** in **Edit mode**. Expired items are removed from the database during a **system purge** of all expired items.

expiry-based caching

A **caching** method that uses a retention period to specify how long the item is valid in the cache before a refresh is required. When there is a request for the item beyond the retention period, it is refreshed in the cache.

Oracle Web Cache uses both expiry-based caching and invalidation-based caching. Any data saved in Oracle Web Cache is considered valid until it is invalidated or it expires. For example, if expiry-based caching is specified for a fully assembled page, the page content remains valid in the cache for the specified retention period before it needs to be regenerated.

See also **invalidation-based caching** and **validation-based caching**.

expiry notification

A message automatically sent to a user or **group** indicating that an **item** on the **page** is about to expire. The notification is set up by the **page group administrator**.

explicit object

An object which is explicitly selected, from the Navigator or Bulk Actions, for export.

See also **manifest** and **referenced object**.

export

A method of creating a set of files (**transport set**) that contains **page groups**, **pages**, **portlets**, and other content from a single Oracle Portal instance. You can then **import** this set of files into another Oracle Fusion Middleware instance.

eXtensible Markup Language

See [XML](#).

extension

A Java class that extends the functionality of [Oracle JDeveloper](#). For example the [PDK](#) includes an extension to aid with the development of portlets with Oracle JDeveloper.

external application

An application external to Oracle Portal that is typically launched from the External Applications [portlet](#). As each external application is configured by a [portal administrator](#), users simply supply their user name and password information. The [Oracle Application Server Single Sign-On](#) will present these credentials for future authentication challenges.

external object

An object which is an external dependency of an [explicit object](#). External objects ensure that the explicit objects perform on the target portal.

See also [manifest](#).

favorite

A hyperlink in the Favorites [portlet](#) that provides quick access to a frequently visited [URL](#), either inside or outside your company firewall. An [authenticated user](#) can personalize the Favorites portlet with his or her own preferred set of frequently accessed URLs.

Favorite Content area

An area on the [Oracle Instant Portal](#) home page in which a user's favorite content appears. Users select items for this area by clicking an icon that looks like a house beside the item. The Favorite Content area is different for each user.

favorite group

A collection of [favorites](#) (and favorite groups) that are usually logically related.

Federated Portal Adapter

See [FPA](#).

file item

A type of [item](#) that a user can add to a [page](#). When a user adds a file item to a page, the file is uploaded into the Oracle Portal schema of the [Oracle Metadata Repository](#) and is displayed as a hyperlink on the page. When a user clicks the [display name](#) link, the file may be downloaded to the user's computer or displayed in the user's Web browser, depending on the file type and the configuration of the browser.

In [Oracle Instant Portal](#) file items are represented by a rectangle with a red asterisk at the top and, optionally, a title and summary. When the user clicks the icon, the file associated with the item opens in a second browser window.

firewall

A system (either hardware or software) that acts as an intermediary to protect a set of computers or networks from outside attack. It regulates access to computers on a local area network from outside, and regulates access to outside computers from within the local area network. A firewall can work either by acting as a [proxy server](#) that

forwards requests so that the requests behave as though they were issued by the firewall machine, or by examining requests and attempting to eliminate suspect calls.

form

A **portlet** created with the **Portlet Builder** that provides a transactional interface to one or more database tables, views, or procedures. For example, you can the Portlet Builder to build a form for entering new employee information into your Human Resources database.

See also **master-detail form**.

FPA

Federated Portal Adapter. The Federated Portal Adapter is a module in the portal instance (written in both Java and PL/SQL) that receives **SOAP** messages for a **Web provider**, parses the SOAP, and then dispatches the messages to a **database provider** as PL/SQL procedure calls. In effect, the Federated Portal Adapter makes a database provider behave exactly the same way as a Web provider, allowing users to distribute their database providers across database servers. All remote providers can be treated as Web providers, hiding their implementation (database or Web) from the user. The most common use is to share database providers (including page groups) owned by one portal instance among other portal instances.

frame driver

A **portlet** created with the **Portlet Builder** consisting of a Web page divided into two frames. A driving frame contains a SQL **query** that drives the contents of the second (target) frame.

Full Screen mode

An optional **portlet Show mode** that provides more content than can be shown in the portlet when it is sharing a page with other portlets.

function

A PL/SQL subprogram that performs a specified sequence of actions and then returns a value. Functions are usually small blocks of code written to perform a specific task within the scope of a larger application.

In a **page**, end users execute functions by clicking the title of a PL/SQL or custom item.

gist

An **Oracle Text** summary consisting of the document paragraphs that best represent the overall subject matter. You can use such summaries to skim the main content of the text or assess your interest in the text's subject matter.

global privilege

A **privilege** that grants a certain level of access to a user or **group** on all **objects** of a particular type. For example, you could grant a Web Designer group Manage privileges on all **styles**.

grantee

A user who is given privileges on an **object** by another user.

Graphical view

A page editing view that renders **page** content in-place on the page. Graphical view enables you to view pages and **items** as they appear on the finished page as you edit.

Contrast with [Layout view](#) and [List view](#).

group

A collection of Oracle Portal users who typically share a common need or interest; for example, Human Resources, Accounting, and so on. Groups make it easy to grant access to an [object](#) (such as a [page](#) or [portlet](#)) to several users at once. You can also use groups to implement user roles by assigning role-related privileges to a group, then adding users in that role. [OID](#) tracks the membership of Oracle Portal groups.

group owner

A user who has the privilege to add or delete members from a [group](#), or to delete the group itself. Groups can have more than one owner.

HA

High Availability. A collection of solutions to ensure that your applications meet the required availability to achieve your business goals, eliminating single points of failure with no or minimal outage in service.

Handheld Device Markup Language

See [HDML](#).

HDML

Handheld Device Markup Language. A simple language to define hypertext-like markup content and applications for handheld devices with small display.

Help mode

An optional [portlet Show mode](#) that displays usage information about the functionality of the portlet.

hierarchy

A [portlet](#) created with the [Portlet Builder](#) 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 display data such as employees in an organization chart or the hierarchical relationship between menus in a Web site.

home page

The [page](#), defined within Oracle Portal, that typically displays when logging on or when a user clicks a Home [smart link item](#). The [portal administrator](#) chooses this page for [public users](#); [authenticated users](#) may choose their own. If the portal administrator enables [mobile page](#) design, he or she can specify a separate mobile home page to display when the portal is accessed from a mobile device.

hosted site

See [stripe](#).

HTML

Hyper Text Markup Language. A format for encoding hypertext documents that may contain text, graphics, and references to programs and other hypertext documents.

HTML content layout

A type of [HTML Template](#) that uses item-level [substitution tags](#) to define a formatting scheme for individual [regions](#). The HTML content layout repeats itself for each [item](#) or [portlet](#) in the region.

Contrast with [HTML page skin](#).

HTML page skin

A type of [HTML Template](#) that uses page-level [substitution tags](#) to control the appearance of the area surrounding page content. You can apply HTML page skins to [pages](#) or [Portal Templates](#).

Contrast with [HTML content layout](#).

HTML Template

A portal [object](#) built using your own [HTML](#) code that wraps around your [page](#) or [region](#) content. You can use an Oracle Portal wizard or any third party HTML editor to build HTML Templates.

See also [HTML content layout](#) and [HTML page skin](#). Contrast with [Portal Template](#).

HTTP

Hyper Text Transfer Protocol. The underlying format, or protocol, used across the Web to format and transmit messages and determine what actions [Web servers](#) and browsers should take in response to various commands. HTTP is the protocol typically used between Oracle Fusion Middleware and its clients.

Hyper Text Markup Language

See [HTML](#).

Hyper Text Transfer Protocol

See [HTTP](#).

IDE

Integrated Development Environment. A visual tool containing editors, debuggers, screen painters, object browsers, and the like.

ILS

Item Level Security. A mechanism that controls granular access to [items](#) on a given [page](#). ILS authorizes item managers to grant explicit item access to users and [groups](#) that take precedence over page-level privileges.

image item

A type of [item](#) that a user can add to a [page](#). You can add images in JPEG, GIF, or PNG formats.

In [Oracle Instant Portal](#), as opposed to the images that are added as part of a [rich text item](#) or [expandable rich text item](#), image items are designed to stand alone on the page. An image item is added through the Add Item icon; an image that is part of a text item is added through the Insert Image window.

image map item

A type of [item](#) that a user can add to a [page](#). An image map is a single image with hotspots that, when clicked, link to other [URLs](#). For example, you can create an image map of the world in which each continent is hyperlinked to more information about the continent.

import

A method of transporting content and **objects** (for example, **page groups**, **pages**, and **portlet**s) into an Oracle Portal instance. For example, you can import a page, its associated **style**, and its contents from one instance of Oracle Portal to another.

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.

in-place editing

In **Oracle Instant Portal**, the ability to add items or pages in context, as opposed to having to create these objects elsewhere and then add them to the page or portal.

Integrated Development Environment

See **IDE**.

internal image name

The name used to identify an image that has been uploaded to the portal. Uploaded images can be reused within the portal by referencing their internal names.

internal provider

A type of **provider** that makes **page group objects** (**pages**, **navigation pages**, and so on) available to instances of Oracle Portal.

invalidation-based caching

A **caching** method where an item remains in the cache until it is explicitly invalidated. For example, a user may update an item, requiring the item in the cache to be invalidated. The next time there is a request for the invalidated item, it is refreshed in the cache.

Oracle Web Cache uses both expiry-based caching and invalidation-based caching. Any data saved in Oracle Web Cache is considered valid until it is invalidated or it expires. When the information cached in Oracle Web Cache becomes inaccurate, it must be invalidated. For example, **page metadata** saved in Oracle Web Cache is invalidated when a page designer changes the page structure or when user privileges change. Likewise, a **portlet instance** is invalidated whenever it is personalized by an end user.

See also **expiry-based caching** and **validation-based caching**.

item

1. An individual piece of content (text, hyperlink, image, and so on) that resides on a **page** in an item **region**. Users with an appropriate privilege level can add items to a page. Item content and **metadata** are stored in the Oracle Portal schema of the **Oracle Metadata Repository**. Items are rendered on the page according to the layout, **style**, and **attribute** display defined for the item region.

See also **item type**.

2. In **Oracle Instant Portal**, the means through which content is added to a page. Available item types are **rich text item**, **expandable rich text item**, **file item**, **URL item**, **email item**, and **image item**.

item ID

The local database reference to the content of an **item**. An item ID value is used in custom **item types** to pass items to PL/SQL procedures. The function uses the item ID to access the content of the item.

item level security

See [ILS](#).

item metadata

The stored information or **attributes** of an **item**.

item placeholder item

A type of **item** that a user can add to a **page**. An item placeholder identifies where the content from items that use a **Portal Template** for items will display in relation to the rest of the template content.

item type

An object that defines the contents of an **item** and the **attributes** that are stored (**metadata**) about an item. Base item types included with Oracle Portal are categorized as **content item types** and **navigation item types**.

Custom item types are item types created by **page group administrators** to extend the functionality provided by base item types and store additional attribute information about items.

item versioning

See [versioning](#).

J2EE

Java 2 Platform, Enterprise Edition. A platform that enables application developers to develop, deploy, and manage multitier, server-centric, enterprise level applications. The J2EE platform offers a multitiered distributed application model, integrated XML-based data interchange, a unified security model, and flexible transaction control. You can build your own J2EE **portlets** and expose them through **Web providers**.

See also [Oracle WebLogic Server](#).

J2SE

Java 2 Platform, Standard Edition. A platform that enables application developers to develop, deploy, and manage Java applets and applications on a desktop client platform such as a personal computer or workstation. J2SE not only defines **API** standards, but also specifies the deployment of enterprise applications, thus enabling Fusion Middleware administrators to perform the deployment regardless of the vendor of the J2SE server.

See also [Oracle WebLogic Server](#).

Java 2 Platform, Enterprise Edition

See [J2EE](#).

Java 2 Platform, Standard Edition

See [J2SE](#).

JavaScript

A scripting language developed by Netscape that enables generation of **portlets** that introduce dynamic behavior in otherwise static **HTML**. The **Portlet Builder** enables you to use JavaScript to create routines that validate entry fields in **forms** and **personalization forms**. You can also create JavaScript event handlers for entry fields and buttons on forms.

Java Specification Request

See [JSR 168](#).

JavaServer Page

See [JSP](#).

JSP

JavaServer Pages. An extension to **servlet** functionality that provides a simple programmatic interface to Web pages. JSPs are **HTML** pages with special tags and embedded Java code that is executed on the Web or application server. JSPs provide dynamic functionality to HTML pages. They are actually compiled into servlets when first requested and run in the servlet container.

See also [JSP tags](#).

JSR 168

Java Specification Request (JSR) 168. Defines a set of APIs for building standards-based portlets using Java. Portlets built to this specification can be rendered to a portal locally or deployed to a WSRP container for rendering portlets remotely. For more information, see <http://jcp.org/en/jsr/detail?id=168>.

JSP tags

Tags that can be embedded in **JSPs** to enclose Java code. These tags use the `<jsp:` syntax and enclose action elements in the JSP with `begin` and `end` tags similar to **XML** elements.

keyword

An **attribute** used to provide additional information about a **page** or **item** so that users can easily locate the page or item during a search.

Layout view

A page editing view that enables you to add, arrange, and remove **regions** on the **page**. You can also hide, show, delete, or move content in this view.

Contrast with [Graphical view](#) and [List view](#).

LBR

Load-balancing router. A very fast network device that distributes Web requests to a large number of servers. It provides portal users with a single published address, without their having to send each request to a specific **middle tier** server.

LDAP

Lightweight Directory Access Protocol. A standard for representing and accessing user and group profile information.

level

An object used to provide structure to [mobile pages](#) and as a way to limit the amount of content displayed on the smaller screens of mobile devices. Users drill down into the levels on a mobile page to view more content.

library

A collection of one or more PL/SQL or Java program units. Libraries can be referenced by several applications simultaneously.

Lightweight Directory Access Protocol

See [LDAP](#).

Link mode

An optional [portlet Show mode](#) that enables portlets to render themselves on mobile devices, such as cellular telephones.

List view

A page editing view that displays a listing of all [page](#) content and provides options that enable you to perform actions (delete, move, copy, and so on) on multiple [objects](#).

Contrast with [Graphical view](#) and [Layout view](#).

list of objects item

A type of navigation [item](#) that a user can add to a [page](#) to list objects (for example, pages and [perspectives](#)) as a drop-down list or as links (with or without associated images).

list of values

See [LOV](#).

load-balancing router

See [LBR](#).

local provider group

The collection of [providers](#) that are defined within an instance of Oracle Portal. Provider groups make it easier to share providers defined or registered within one instance of Oracle Portal with other Oracle Portal instances.

See also [provider group](#). Contrast with [remote provider group](#).

lock

1. A setting automatically applied to a [Portlet Builder portlet](#) when it is being edited. The setting prevents other users from editing the portlet.
2. In [WebDAV](#) the action of preventing other users from editing a file. Locking a file in a WebDAV client checks out the corresponding [item](#) in the portal itself.

login/logout link item

A type of navigation [item](#) that a user can add to a [page](#) to enable other users to log in or log out of the portal.

LOV

List of values. A [portlet](#) created with the [Portlet Builder](#) that enables developers to add selectable values to entry fields in [forms](#). A single list of values can be displayed in different formats, such as combo boxes, radio buttons, or check boxes.

Manage privileges

A privilege level on an [Oracle Instant Portal](#) page that allows the user to edit, move, or delete a top-level page and all its child pages. A user with Manage privileges on a portal's home page is considered an administrator of that portal. A user with Manage privileges also has all Contribute and View privileges.

manifest

The list of objects in a [transport set](#) and their dependents, which provides a granular level of control over the import mode.

master-detail form

A [portlet](#) created with the [Portlet Builder](#) 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.

See also [form](#).

master item ID

An identifier for an [item](#) that is the same for all versions of that item.

menu

A [portlet](#) created with [Portlet Builder](#) that displays a Web page containing options that end users can click to navigate to other menus, other Portlet Builder portlets, or [URLs](#).

metadata

Data that describes data. For example [item attributes](#) store item metadata, such as display name, description, and author.

middle tier

Part of the Oracle Fusion Middleware architecture that handles [HTTP](#) user requests by forwarding them to the appropriate portal database or [provider](#), assembles portal [pages](#), and manages [caching](#) of portal content.

MIME type

Multipurpose Internet Mail Extension type. A message format used on the Internet to describe the contents of a message. MIME is used by [HTTP](#) servers to describe the type of content being delivered.

mobile page

A type of [page](#) that enables [page designers](#) to produce pages specifically for mobile devices, for example, cellular phones.

Mobile Preview mode

A preview mode that enables you to preview how your page will look on a mobile device.

mobile XML

See [Oracle Application Server Wireless XML](#).

Model-View-Controller

See [MVC](#).

mod_weblogic

The **Oracle HTTP Server** module that manages the communication between the Oracle HTTP Server and **Oracle WebLogic Server**.

mod_plsql

The **Oracle HTTP Server** module that handles the database connections made from the Oracle HTTP Server. It enables PL/SQL database procedures to generate **HTTP** responses containing formatted data and **HTML** code that can display in a Web browser.

MVC

A classic design pattern often used by applications that need the ability to maintain multiple views of the same data. The MVC pattern hinges on a clean separation of objects into one of three categories: models for maintaining data, views for displaying all or a portion of the data, and controllers for handling events that affect the model or views. Because of this separation, multiple views and controllers can interface with the same model. Even new types of views and controllers that never existed before, such as portlets, can interface with a model without forcing a change in the model design.

navigation area

In **Oracle Instant Portal**, the area along the left side of the page in which the search box and a list of the page's child pages appear.

navigation item type

A means of providing navigation and access to portal-specific functions.

Built-in navigation item types include:

- **smart link item**
- **smart text item**
- **login/logout link item**
- **basic search box item**
- **list of objects item**
- **object map link item**
- **page path item**
- **page function item**

See also **item type**. Contrast with **content item type**.

navigation page

A special purpose **page** within a **page group** that is typically embedded on other pages or **Portal Templates** to implement standard user interface effects such as navigation bars and banners. Often contains **navigation item types** for navigation within the portal.

Navigator

A feature for locating **objects** and interacting with Oracle Portal. Provides access to **objects** to which the user has privileges, such as **page groups**, **providers**, and database objects.

New Content area

An area on the [Oracle Instant Portal](#) home page in which content added anywhere in the portal over the last 24 hours is gathered.

non-default subscriber

A [subscriber](#) that has a [stripe](#) on a hosted Oracle Portal provided by an [ASP](#).

object

1. Portal object: A structure such as a [page group](#), [portlet](#), [page](#), or [style](#).
2. Database object: An Oracle database structure such as a [table](#), procedure, or [trigger](#). These objects can be created using Oracle Portal wizards or Oracle database commands.

object map link item

A type of navigation [item](#) that a user can add to a page to display a map of [objects](#) that are available in the portal.

OEM

See [Oracle Enterprise Manager](#).

OID

See [Oracle Internet Directory](#).

OmniPortlet

A [Web provider](#) that provides portlets that can display spreadsheet, XML, and Web Service data as tabular, chart, news, bullet, and form layouts.

Oracle Metadata Repository

An Oracle database that contains schemas and business logic used by Fusion Middleware components (including Oracle Portal) and other pieces of the infrastructure.

Oracle Portal uses a schema within the Oracle Metadata Repository to store and manage the content and [metadata](#) associated with the portal instance. This is sometimes referred to as the [content repository](#).

Oracle Portal

A component of Oracle Fusion Middleware used for the development, deployment, administration, and configuration of enterprise class [portals](#). Oracle Portal incorporates a portal building framework with self-service publishing features to enable you to create and manage information accessed within your portal.

Oracle Portal Developer Kit

See [PDK](#).

Oracle Application Server Single Sign-On

A component of Oracle Fusion Middleware that enables users to log in to all features of the Oracle Fusion Middleware product suite, as well as to other Web applications, using a single user name and password. Oracle Portal is integrated with Oracle Application Server Single Sign-On as a [partner application](#) and delegates authentication to it.

Oracle Web Cache

A component of Oracle Fusion Middleware that improves the performance, scalability, and availability of frequently used Web sites. By storing frequently accessed URLs in memory, Oracle Web Cache eliminates the need to repeatedly process requests for those URLs on the Web server. Oracle Web Cache uses [invalidation-based caching](#) and is integrated with Oracle Portal for improved performance.

See also [portal cache](#).

Oracle Application Server Wireless

A component of Oracle Fusion Middleware used to deliver information and applications to mobile devices. Using Oracle Application Server Wireless, you can create custom portal sites that use different kinds of content, including Web pages, custom Java applications, and [XML](#)-based applications. Oracle Application Server Wireless sites make this diverse information accessible to mobile devices without your having to rewrite the content for each target device platform.

Oracle Application Server Wireless XML

A device independent markup language used for communication between Oracle Portal and [Oracle Application Server Wireless](#).

Oracle Portal

See [Oracle Portal](#).

Oracle Portal Verification Service

(Previously known as Portal Studio). A major component of Portal Center (<http://www.oracle.com/technology/products/ias/portal>) that is specifically tuned to the needs of the portal developer. This site provides developers a way to test and display remote portlets exposed as Web or WSRP providers without having to install their own copy of Oracle Portal. Developer's portlets reside on their servers and must be accessible over the Internet. You can access Oracle Portal Verification Service directly at <http://portalstandards.oracle.com>.

Oracle Enterprise Manager

See [Oracle Enterprise Manager](#).

Oracle HTTP Server

The [Web server](#) component of Oracle Fusion Middleware that is used to service [HTTP](#) requests. It is the part of the [middle tier](#) that handles requests between the Web and Oracle Portal. Extensions to the Oracle HTTP Server support Java [servlets](#), [JSPs](#), Perl, PL/SQL, and CGI applications.

Oracle Instant Portal

A product built on top of OracleAS Portal, designed to provide a common place to share and exchange content for smaller groups of users.

Oracle Instant Portal administrator

A user who has full privileges over the entire portal. Any user with [Manage privileges](#) on the portal's home page is considered an [Oracle Instant Portal administrator](#) for that portal. The PORTAL and ORCLADMIN users, created during the installation process, are Oracle Instant Portal administrators for *all* portals. Only an Oracle Instant Portal administrator can change the banner or style, manage users, and create new [top-level pages](#).

Oracle Internet Directory

The repository for storing Oracle Portal user credentials and **group** memberships. By default, the **Oracle Application Server Single Sign-On** authenticates user credentials against Oracle Internet Directory information about dispersed users and network resources. Oracle Internet Directory combines LDAP version 3 with the high performance, scalability, robustness, and availability of the Oracle database.

Oracle JDeveloper

Oracle JDeveloper is an integrated development environment (**IDE**) for building applications and Web services using the latest industry standards for Java, XML, and SQL. Developers can use Oracle JDeveloper to create Java portlets.

Oracle PartnerNetwork Solutions Catalog

(<http://solutions.oracle.com/>) A collection of information on Oracle Partner joint products and services. The Solutions Catalog includes information on partners who offer Oracle Portal related products and services.

Oracle Technology Network

See **OTN**.

Oracle Text

A feature of Oracle9i and later that provides advanced search and retrieval services on content stored in an Oracle repository. It is fully integrated into Oracle Portal to provide users with the ability to perform a full text search and retrieve content managed within the Oracle Portal schema of the **Oracle Metadata Repository**. It also provides automatic grouping and classification of results by **gist** and **theme**.

Oracle Ultra Search

An **Oracle Text**-based application that supports crawling, indexing, and federated searching of multiple, heterogeneous repositories including databases, file systems, **Web servers**, and e-mailing list archives.

Contrast with **search portlet**.

Oracle WebLogic Server

A scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications and is an ideal foundation for building applications based on Service Oriented Architectures (SOA). SOA is a design methodology aimed at maximizing the reuse of application services.

The WebLogic Server complete implementation of The Sun Microsystems Java EE 5.0 specification provides a standard set of APIs for creating distributed Java applications that can access a wide variety of services, such as databases, messaging services, and connections to external enterprise systems. End-user clients access these applications using Web browser clients or Java clients.

OTN

Oracle Technology Network. The online Oracle technical community that provides a variety of technical resources for building Oracle-based applications. You can access OTN at <http://www.oracle.com/technology/>.

Overwrite mode

See **Replace on Import mode**.

package

A database **object** consisting of a PL/SQL specification and a body. The specification includes the data types and subprograms that can be referenced by other program units. The body includes the actual implementation of the package.

page

A portal **object** that contains **portlets** and **items**. Each time you display a page, it is dynamically assembled and formatted according to the portlets and layout chosen for that page.

See also **page type**.

page designer

A user with the Manage privilege on a page (also known as a page manager). A user with this privilege can perform any action on the page and can create sub-pages under the page. The page designer is often responsible for designing the layout (or region configuration) of the page and assigning privileges on the page to other users (for example, to determine who can add content to the page).

The scope of a page designer's control over a page may be limited if the page is based on a template.

page function item

A type of navigation **item** that a user can add to a **page**. A page function is a procedure call that a user can add to a custom **page type**. If there are no page functions associated with the current page, the page function item does not display.

page group

A portal **object** that groups and sets properties of related portal objects, such as **pages**, **styles**, **navigation pages**, and **perspectives**. Page groups typically contain a hierarchy of pages and sub-pages for organizing content.

page group administrator

A user who has full privileges over an entire **page group**. Page group administrators set up and maintain the page group; designate page owners; and create a taxonomy. Page group administrators can also view and manage all the **pages** in the page group.

page group map

A hierarchical representation of all **page groups** in a portal, which enables users to access individual **pages** within the page group. The page group map is tailored for each user; only the pages the user is authorized to view or edit are displayed.

page group quota

See **quota**.

page link item

A type of **item** that a user can add to a **page**. A page link provides a route using a hyperlink to another page within the **portal**. When the user clicks the **display name** link, the page referenced by the item is displayed in the user's browser.

page manager

See **page designer**.

page metadata

Stored information or attributes about a [page](#), which is used by Oracle Portal to set its layout and cache.

page path item

A type of navigation [item](#) that a user can add to a [page](#). A page path is a chain of page reference names. Page paths, often called breadcrumbs, describe the complete directory path.

page toolbar

In page [Edit mode](#), the links at the top of the page that enable you to edit various aspects of the [page](#), switch editing views (for example, from [Graphical view](#) to [Layout view](#)), edit [page group](#) properties, and so on.

page type

A portal [object](#) that defines the content of a [page](#) and the information that is stored about a page. Base page types included with Oracle Portal are: [standard page](#), [mobile page](#), [PL/SQL page](#), [JSP](#), and [URL page](#). Custom page types are page types created by [page group administrators](#) to extend the functionality provided by base page types and store additional information about pages.

Parallel Page Engine

See [PPE](#).

parameter

A value passed between [pages](#) and [portlet](#)s, or between portlets.

A page parameter is a page level parameter (created by a page designer) whose values can be mapped to portlet parameters.

A portlet parameter is declared by a provider. Page designers map page parameters to portlet parameters. When the [PPE](#) requests a portlet from a provider, only the portlet parameters that the portlet declared and mapped to page parameters are sent.

parameter entry field

A field on a [personalization form](#) that enables end users to enter values that will be passed to an Oracle Portal [portlet](#).

partial page caching

See [PPC](#).

partner application

An application that has delegated its authentication to [Oracle Application Server Single Sign-On](#). If registered with the OracleAS Single Sign-On Server, users can log in to multiple [partner applications](#) using a single log in page. In a given session, once users have been authenticated by the OracleAS Single Sign-On Server, they won't need to log in again to access additional partner applications.

path aliasing

See [path-based URL](#).

path-based URL

A path-based URL identifies the path taken through the **portal** to get to a particular **object**. It is an easy-to-read URL but as it contains the names of portal objects, the URL becomes invalid if the name of any object within the path changes.

For example, the path-based URL to access a top-level **page** (sample_page) of the **page group** MyPageGroup:

```
http://mymachine.mycompany.com:5000/portal/page/mydad/MyPageGroup/sample_page
```

Contrast with **durable URL**.

PDK

Oracle Portal Developer Kit. The development framework used to build and integrate Web content and applications with Oracle Portal. It includes toolkits, samples, and technical articles that help make portal development simple. You can take existing Java **servlets**, **JSPs**, **URL**-accessible content and Web Services and turn them into **portlets**. It is typically used by external developers and vendors to create portlets and services. The PDK is regularly updated on **Portal Center** (<http://portalcenter.oracle.com/>) to provide developers with the latest tools and techniques.

See also **PDK-Java**, **PDK-PL/SQL**, and **PDK-URL Services**.

PDK-Java

A toolkit for implementing **portlets** in Java and adding portal features. Used to declaratively turn your existing Java **servlets**, **JSPs**, and Web services into portlets.

See also **PDK**. Contrast with **PDK-PL/SQL**.

PDK-PL/SQL

A set of articles, samples, and services that enable PL/SQL programmers to easily create portlets and extend them by using PL/SQL **APIs**.

See also **PDK**. Contrast with **PDK-Java**.

PDK-URL Services

A utility for declaratively turning secured and public Web content into **portlets**. These services are capable of dynamically passing parameters to target **URLs**, clipping and reformatting content, and providing Oracle Application Server Single Sign-On for applications requiring form-based or basic authentication. These services also allow developers to take any application written in any language and easily create integrated portlets. PDK-URL Services takes the URL of an application, parses the content, and uses the **PDK-Java** framework to create a portlet.

See also **PDK**.

Pending Approvals Monitor

A portlet that enables you to list pending approvals in the page groups that you administer. You can list the pending approvals by approver, date, page group, or submitter.

Pending Items Preview mode

A preview mode that enables you to view items that are awaiting approval. This mode can be used by content contributors to preview items they have added before they are approved, and by approvers to preview items before they approve or reject them.

See also **Edit mode**.

personalization form

A page that prompts end users for values to pass to a **Portlet Builder portlet**. End users can view the personalization form for a portlet, if one has been created, by clicking the portlet's **Personalize** link.

personal page

An area within Oracle Portal where **authenticated users** can store personal content and share it with other users. The **portal administrator** can choose to create a personal page for a user when creating a user account.

perspective

A cross-category grouping of **items**. Perspectives help users 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* to items about vacation types. Users publishing content using an item type that includes a perspective attribute may specify none, one, or many values.

Contrast with **category**.

PL/SQL item

A type of **item** that a user can add to a **page**. A PL/SQL item contains a block of PL/SQL code. When a user clicks the item, the code is executed. The result displays in the user's browser. PL/SQL items can also be displayed directly on the page.

PL/SQL function

See **function**.

PL/SQL page

A type of **page**. PL/SQL pages contain PL/SQL code that generates **HTML** when the page is rendered.

plug-in

See **extension**.

poll

A set of questions used to find out information from users.

Contrast with **survey** and **test**.

portal

A common interface (that is, a Web page) that provides a personalized, single point of interaction with Web-based applications and information relevant to individual users or class of users. Portals built using Oracle Portal are made up of **pages** managed within **page groups**, containing **portlet**s and **item**s.

portal administrator

A user with the highest level of privileges in Oracle Portal. Portal administrators can view and modify anything in Oracle Portal, even **pages** and **database providers** marked private. (The only exception is **groups**: although portal administrators can modify the `PORTAL_ADMINISTRATORS` and `PORTAL_PUBLISHERS` groups, they cannot modify any other group unless they have been named **group owner**.)

Portal Builder page

A predefined [page](#) that contains development and administrative [portlets](#) used to build and manage portal [objects](#) and services.

portal cache

A mechanism for storing cache entries for objects that use [validation-based caching](#). It also acts as a backup to the memory-based [Oracle Web Cache](#) when objects use both validation-based caching and [invalidation-based caching](#).

Portal Catalog

See [Oracle PartnerNetwork Solutions Catalog](#).

Portal Center

(<http://portalcenter.oracle.com/>) A Web site where you can find out everything you want to know about Oracle Portal. Updated frequently, it always has the latest product information, and is home to the [Portal Developer Services](#) and [Oracle Portal Verification Service](#). This Web site contains all information about the product (including documentation, demonstrations, and so on), and provides access to Oracle Portal expertise.

Portal Community

A network of people dedicated to creating and exchanging information about Oracle Portal. This community includes anyone who uses Oracle Portal; it can leverage the [Portal Knowledge Exchange](#) for sharing Portal-related information and take advantage of the [Portal Developer Services](#).

Portal DB provider

See [database provider](#).

Portal Developer Kit

See [PDK](#).

Portal Developer Services

The network of people dedicated to creating and exchanging Oracle Portal expertise. This program provides online testing tools through [Portal Center](#) (<http://portalcenter.oracle.com/>), as well as other venues, and interaction with the product team and other portal developers, using newsletters, surveys, and the [Portal Knowledge Exchange](#).

See also [Portal Community](#).

Portal Knowledge Exchange

A self-service Web site where subscribers to the [Portal Developer Services](#) can share white papers, techniques, and portlets with others in the [Portal Community](#). Contributions can also be rated so that the most valuable contributions can be easily located.

portal page

See [page](#).

portal repository

See [Oracle Metadata Repository](#).

Portal Services

A set of services running in the OracleAS Portal WLS instance that are used to assemble portal pages and to access portal and page metadata. The Parallel Page Engine (PPE) is one of the Portal Services that assembles portal pages. Other services, like those previously provided by `mod_plsql`, are incorporated into the Portal Services as well.

portal session

A period of interaction between a browser and Oracle Portal, from the initial access to log off, closure of the browser window, or expiration of the session after a period of inactivity.

Portal smart link item

See [smart link item](#).

Portal smart text item

See [smart text item](#).

Portal Studio

See [Oracle Portal Verification Service](#).

Portal Template

A portal [object](#) built declaratively using a wizard that enforces specific layouts, colors, fonts, and backgrounds for [pages](#) and [items](#). You can use Portal Templates with [navigation pages](#), [standard pages](#), and pages based on custom page types that are based on the standard page type. You can also use Portal Templates with [text items](#), [PL/SQL items](#), [URL items](#), and all [file items](#) with a [MIME type](#) of `text/html` or `text/plain`.

Contrast with [HTML Template](#).

portlet

A reusable, pluggable Web component that typically displays portions of Web content. Portlets are the fundamental building blocks of a portal [page](#). Using the [Portlet Builder](#), you can easily create your own portlets. Oracle Portal also provides several ways to build portlets programmatically and to integrate any kind of Web content. Portlets may be implemented using various technologies, such as Java, [JSPs](#), Java [servlets](#), [PL/SQL](#), [Perl](#), [ASP](#), and so on. The [PDK](#) covers the standard-based portlet development options that Oracle Portal provides.

Portlet Builder

A collection of portlet-building wizards that are accessible through the Provider tab in the Portal Navigator. You can use these wizards to build [charts](#), [forms](#), [reports](#), [calendars](#), and lists of values.

portlet instance

A [portlet](#) placed on a particular [page](#).

portlet provider

See [provider](#).

portlet publisher

A user who can publish portal [objects](#) ([pages](#) or otherwise) as [portlets](#) so that they can be included on pages.

portlet record

A programmatic structure that contains detailed information about a [portlet](#), such as its implementation style and [Show mode](#) (PL/SQL).

Portlet Repository

A special [page group](#) that contains the [portlets](#) available from the local [providers](#) and any registered remote providers. When you register a provider, the provider and its portlets are added to the Portlet Repository.

PPC

Partial Page Caching. A feature that enables [Oracle Web Cache](#) to independently cache and manage fragments of HTML documents. A template page is configured with Edge Side Includes ([ESI](#)) markup tags that tell Oracle Web Cache to fetch and include the HTML fragments. The fragments themselves are HTML files containing discrete text or other objects.

PPE

Parallel Page Engine. A multi-threaded [servlet](#) engine that runs in the [Oracle WebLogic Server](#) container and services [page](#) requests. The PPE reads [page metadata](#), calls [providers](#) for [portlet](#) content, accepts provider responses, and assembles the requested page in the specified page layout. The Parallel Page Engine is part of the Portal Services, which run on the Oracle Fusion Middleware [middle tier](#).

pretty URL

See [path-based URL](#).

Preview mode

An optional [portlet Show mode](#) that provides users with a preview of the portlet before they add it to a page.

primary key

One or more columns in a database table that, in combination, uniquely identify a row in a table.

privilege

In Oracle Portal, the right to perform an action. Privileges are either global (set through in the User or Group Profile) or specific to particular [objects](#) (usually set through the object's Access tab). When building applications, access can also be granted to database objects, shared portlets, portlets, and applications.

producer

See [provider](#).

profile

The information stored about an Oracle Portal user or group, such as password, user ID, and [privileges](#).

property sheet

A built-in [attribute](#) that displays a summary of an [item](#)'s attributes or a [page](#)'s properties.

provider

The communication link between Oracle Portal and a **portlet**. There are two types of providers: **Web providers** and **database providers**. Web providers may reside anywhere on the network and are addressed through **SOAP**. Web providers may be implemented using any Web technology. You can build your own Web providers by using the **PDK-Java** and the **PDK-URL Services**. Database providers reside within an Oracle database and manage portlets while performing data-intensive operations.

Providers act as containers for portlets; each portlet communicates with Oracle Portal through its provider. Providers also manage the portlets they contain.

provider definition

A declarative, **XML**-based configuration file (`provider.xml`) that describes a **Web provider**, its **portlets**, and the location of the content to be displayed in the portlets. This configuration file also describes the behavior of the provider and its portlets.

provider group

A logical collection of **Web providers** defined by a provider group service. A **portal administrator** can register provider groups for use with their portal. Once registered, a provider group simplifies the process of registering individual **providers** in the group. This enables organizations that create Web providers to publish registration details of their providers and facilitate automatic registration with any Oracle Portal instance. The only information that must be given to the portal administrator is the name and location of the provider group.

See also **local provider group** and **remote provider group**.

provider record

The record returned by a **database provider** containing specified information about a **portlet**.

proxy server

A proxy server typically sits on a network **firewall** and enables clients behind the firewall to access Web resources. All requests from clients go to the proxy server rather than directly to the destination server. The proxy server forwards the request to the destination server and passes the received information back to the client. The proxy server channels all Web traffic at a site through a single, secure port; this enables an organization to create a secure firewall by preventing Internet access to internal machines, while allowing Web access.

public page

Any **page** in a **page group** that is viewable by **public users** (users who are not logged onto Oracle Portal). The page designer or **page group administrator** must explicitly designate a page as public.

public user

A user who can access, but is not logged onto, Oracle Portal. When users first access Oracle Portal, they do so as public users, whether or not they have the ability to log on. A public user can view any **page** that has been marked as public, but cannot personalize or edit any content, or view pages that have any form of access control.

Contrast with **authenticated user**.

purge

See **system purge**.

query

A SQL SELECT statement that specifies which data to retrieve from one or more tables or views in a database.

quota

The amount of space provided in a page group or in the Oracle Portal schema of the [Oracle Metadata Repository](#) to store uploaded documents.

recent object

A portal [object](#), such as a [page](#) or [portlet](#), that has recently been displayed or edited. Each [authenticated user](#) has his or her own Recent Objects portlet that provides links to the last n objects accessed.

referenced object

An object which is directly or indirectly referenced by an [explicit object](#).

See also [manifest](#).

reference path

The path that uniquely identifies a [portlet instance](#) on a [page](#). A reference path can be used to target [parameters](#) to individual portlets on a given page.

region

A carved-out area on a [standard page](#) used to define the page layout, define page content ([portlet](#)s and [item](#)s), and control the [style](#) and [attribute](#)s for content displayed in a region. A standard page can have one or multiple regions. Regions can be created above, beneath, or beside other regions.

You can create the following types of regions:

- Undefined regions are regions that have not been assigned a particular type.
- Item regions allow you to add items such as text, images, files, and so forth.
- Portlet regions allow you to include portlets in a region.
- Sub-Page Links regions allow you to display a list of the current page's sub-pages in a region.
- Tab regions allow you to include [tab](#)s in a region.

region banner

A colored, horizontal bar with a title displayed in a [region](#) of a portal [page](#). A banner breaks up the visual flow of a page and groups related [item](#)s that appear beneath it.

remote database

A database running on a separate machine that can be accessed over the network through a connect string or database link.

remote provider group

The collection of [provider](#)s that are defined outside of your local instance of Oracle Portal.

See [provider group](#). Contrast with [local provider group](#).

Replace on Import mode

An import mode. When this option is selected, if the object exists on the target, then it is replaced. If the object does not exist then it is created. When this option is not selected, if the object exists on the target, it is referenced. If it does not exist on the target, it is created.

report

A **portlet** created with the **Portlet Builder** that displays the results of a SQL **query** in a tabular format.

Reuse mode

See **Replace on Import mode**.

rich text editor

A WYSIWIG editor that enables **content contributors** to easily apply formatting to **text items**.

rich text item

One of the available items in **Oracle Instant Portal**, designed for smaller blocks of text. A rich text item appears on the page as a title, a summary, and the full text of the item. Compare to **expandable rich text item**, in which the text is hidden until the user clicks an icon. Both expandable rich text and rich text items may contain images, hyperlinks, and tables, as well as any valid HTML code.

root page

The top level of the **page** hierarchy in a **page group**; it contains all other sub-pages in the page group. Also known as the page group's **home page**.

routing method

A mechanism for organizing an **approval process**. Oracle Portal provides three approval routing methods:

- All, Parallel enables Oracle Portal to send the approval to recipients in the step all at the same time. All of the recipients must respond to the approval before the item approval can move to the next step.
- All, Serial enables Oracle Portal to send the approval to recipients in the step one at a time in the sequence specified. All of the recipients must respond to the approval before the item approval can move to the next step.
- Any, Parallel enables Oracle Portal to send the approval to recipients in the step all at the same time. However, only one of the recipients must respond to the approval before the item approval can move to the next step.

row

A set of values in a table; for example, the values representing one employee in the SCOTT.EMP table.

saved search

A mechanism for saving search criteria under a single name. This feature enables you to repeat the search quickly, by choosing the saved search name rather than re-entering the criteria manually. You can save the results of a **basic search**, **advanced search**, or **custom search**. The Saved Searches portlet lists all the saved searches in a page group.

schema

A collection of **database objects**, including logical structures such as **tables**, **views**, **sequences**, **stored procedures**, **synonyms**, **indexes**, **clusters**, and database links. A schema has the name of the user who controls it.

search portlet

A portlet that enables users to search for **pages** and content within the Oracle Portal schema of the **Oracle Metadata Repository**. Users can also search based on text strings, categories, perspectives, and attributes, and using operators such as CONTAINS, GREATER THAN, LESS THAN, and EQUAL TO.

Contrast with **Oracle Ultra Search**.

self registration

A mechanism that allows users to create new accounts for themselves through a link in the Login portlet.

sequence

A database **object** used to automatically generate numbers for table rows.

servlet

A Java program that usually runs on a **Web server**, extending the Web server's functionality. **HTTP** servlets take client HTTP requests, generate dynamic content (such as through querying a database), and provide an HTTP response.

session

See **portal session**.

shared object

A portal **object** such as a **personal page**, **navigation page**, **style**, **Portal Template**, **perspective**, **category**, or custom type that can be shared across **page groups**.

shared portlet

A **portlet** created with the **Portlet Builder** that is shared between other Portlet Builder portlets. Each shared portlet can be displayed on multiple **pages** with the same personalization.

Shared Screen mode

A **portlet Show mode** that renders the body of the portlet. Every portlet must have at least a Shared Screen mode.

Show mode

The ways by which a **portlet** can be called to display information. These methods include:

- **Shared Screen mode**
- **Edit mode**
- **Edit Defaults mode**
- **Preview mode**
- **Help mode**
- **About mode**

- [Link mode](#)
- [Full Screen mode](#)

simple file item

Similar to a [file item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

simple image item

Similar to an [image item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

Simple Object Access Protocol

See [SOAP](#).

simple page link item

Similar to a [page link item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

simple PL/SQL item

Similar to a [PL/SQL item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

simple text item

Similar to a [text item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

simple URL item

Similar to a [URL item](#) except with fewer [attributes](#), which makes it quicker and easier to create.

Single Sign-On

See [Oracle Application Server Single Sign-On](#).

smart link item

A type of navigation [item](#) that is self-configuring. For example, if you add a Home smart link to a [navigation page](#), when a user clicks the Home link, he or she is automatically taken to his or her [home page](#).

smart text item

A type of navigation [item](#) that is self-configuring. For example, if you add a Current Date smart text item to a [navigation page](#), the current date is automatically pulled from the server and does not need to be specified (through complex coding) by you.

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](#) tracking changes to the master table.

SOAP

Simple Object Access Protocol. A lightweight, [XML](#)-based protocol for exchanging information in a decentralized, distributed environment. SOAP supports different styles of information exchange, including: Remote Procedure Call style (RPC) and Message-oriented exchange. RPC style information exchange allows for request-response processing, where an endpoint receives a procedure-oriented message and replies with a correlated response message. Message-oriented information exchange supports organizations and applications that need to exchange business or other types of documents where a message is sent but the sender may not expect or wait for an immediate response.

SSL accelerator card

A hardware device that handles traffic much faster than regular SSL software.

See also [LBR](#).

SSO

See [Oracle Application Server Single Sign-On](#).

standard page

A type of [page](#) used to contain and manage [items](#) and [portlets](#).

stored procedure

A set of PL/SQL procedures that are stored in a database.

stripe

A secure slice on a [virtual private portal](#) that is assigned to a particular [subscriber](#).

structured UI template

A [shared portlet](#) that controls the look and feel of [Portlet Builder portlets](#) and runs in standalone mode. Structured UI templates display the same image and text in the same location around every portlet that uses the template.

See [user interface \(UI\) template](#). Contrast with [unstructured UI template](#).

struts

A development framework for Java servlet applications based upon the [MVC](#) design paradigm.

style

A set of values and parameters that controls the colors and fonts of [pages](#) and [regions](#). Style settings include font style, size, color, alignment, and background color. Styles can be created for a specific [page group](#) or as a [shared object](#) that is used by pages within multiple page groups.

sub-category

A [category](#) that appears hierarchically beneath another (parent) category. This provides a way of grouping closely related categories together.

sub-item

An [item](#) that appears hierarchically beneath another (parent) item. This provides a way of grouping closely related items together, for example, the spreadsheet that is used by a particular HTML file item could be added as a sub-item of the HTML file item.

sub-page

A [page](#) that appears hierarchically beneath another (parent) page. Every page in a [page group](#) (except the root page) is a sub-page.

sub-perspective

A [perspective](#) that appears hierarchically beneath another (parent) perspective. This provides a way of grouping closely related perspectives together.

subscriber

In the context of hosted portals, a subscriber is a company that signs up with an [ASP](#) and receives a [stripe](#) on a hosted Oracle Portal.

subscription notification

A method by which end users can subscribe to a particular [page](#) or [item](#) so that they are notified (through the My Notifications portlet) when that page or item is updated. The [page designer](#) must include a [Subscribe Portal smart link item](#) for users to be able to subscribe to a page, and must display the [Subscribe attribute](#) for users to be able to subscribe to items. Additionally, the [page group administrator](#) must enable approvals and notifications for the [page group](#).

substitution tag

A special portal tag used within [HTML Templates](#) and [unstructured UI templates](#) to dynamically embed titles, headings, and other elements into the template.

survey

A set of questions used to find out information from users. Surveys can redirect users to different sections of the survey depending on their answers to particular questions.

Contrast with [poll](#) and [test](#).

synonym

An additional name assigned to a [table](#) or [view](#) that can thereafter be used to refer to it.

system level caching

A [caching](#) method where a single copy of an item is stored in the cache (on the middle tier) for all users. Consequently, such items cannot be user specific. All users see the same content for the item.

Contrast with [user level caching](#).

system purge

A process that deletes all items in a [page group](#) from the Oracle Portal schema of the [Oracle Metadata Repository](#) that are marked as deleted or expired. System purges are performed by the [page group administrator](#) or [portal administrator](#).

tab

An area on a [page](#) used to increase the amount of content that the page can display by effectively doubling (or tripling, quadrupling, and so on) the amount of real estate available. Tabs also allow you to group content that is common to a subject area, organization, specific role, and so forth.

table

The basic storage structure in a relational database.

tablespace

The allocation of space in the database.

template

See [HTML Template](#), [Portal Template](#) or [user interface \(UI\) template](#).

temporary tablespace

The allocation of space in the database used for the creation of temporary table segments for operations such as sorting table rows.

test

A set of questions used to assess a user's understanding of a particular subject or subjects. You can provide the correct answer for questions and assign each question a score. You can also hand score essay-type answers.

Contrast with [poll](#) and [survey](#).

text item

A type of [item](#) that a user can add to a [page](#). When you create a text item, you enter text (up to 32KB) in the Item Wizard. The text block is then stored in the Oracle Portal schema of the [Oracle Metadata Repository](#).

theme

A snapshot generated by [Oracle Text](#) that describes a document. Rather than searching for documents that contain specific words or phrases, users can use Oracle Text to search for documents that are about a certain subject, even if that subject is not mentioned explicitly in the document.

title

See [display name](#).

top-level page

An [Oracle Instant Portal](#) page represented by a tab in the portal's tab set. May contain one or more [child pages](#). Page privileges applied to a top-level page are also applied to all its child pages.

translation

A [page group](#) rendered in another language. When a [page group administrator](#) creates a translation, [content contributors](#) can add content in that language. Page group users can also view the translated content by setting their language to one of the supported languages.

transport set

A collection of portal [objects](#) for [export](#) or [import](#). It can contain more than one object of a particular type, such as multiple [page groups](#) and multiple [pages](#).

trigger

A database [object](#) associated with a table. It executes before or after one or more specified events.

Ultra Search

See [Oracle Ultra Search](#).

Uniform Resource Locator

See [URL](#).

unstructured UI template

A [shared portlet](#) that is used to insert content and [HTML](#) code to control the look and feel of [Portlet Builder portlets](#). Unstructured UI templates are based on HTML code that, when executed, dynamically embeds titles, headings, and other elements that make up a page.

See also [substitution tag](#) and [user interface \(UI\) template](#). Contrast with [structured UI template](#).

URL

Uniform Resource Locator. A compact string representation of the location for a resource that is available through the Internet. It is also the format Web clients use to encode requests to Oracle Fusion Middleware.

URL item

A type of [item](#) that a user can add to a [page](#). A URL item, when clicked, provides a route to another Web page. When a user clicks the URL item's [display name](#), the Web page referenced by the [URL](#) displays.

In [Oracle Instant Portal](#), a URL item is represented on the page by a globe and, optionally, a title and summary. When the user clicks the globe, the location specified in the item opens in a secondary browser window.

URL page

A type of [page](#) that provides a route to another Web page, identified by its [URL](#). When a user clicks the page link, the Web page referenced by the link is displayed.

URL portlet

A [portlet](#) created with the [Portlet Builder](#) that displays the contents of a Web page specified by a [URL](#).

user interface (UI) template

A [shared portlet](#) that controls the look and feel of [Portlet Builder portlets](#) in full page display mode. Selecting a UI template when you are building a portlet automatically selects a title on the page where the portlet is displayed, a title background, links to other Web pages, and background colors and images.

See also [structured UI template](#) and [unstructured UI template](#). Contrast with [HTML Template](#) and [Portal Template](#).

user level caching

A [caching](#) method where a copy of an item is stored in the cache (on the middle tier) for each user. Consequently, users may see different content for the same item.

Contrast with [system level caching](#).

validation-based caching

A [caching](#) method that uses a validation check to determine if the cached item is still valid. This is the caching method used by the [portal cache](#). Before an item in the portal cache is used, the [PPE](#) contacts the portal repository or the [provider](#) that the content came from to determine if the cached item is still valid.

Contrast with [expiry-based caching](#) and [invalidation-based caching](#).

versioning

A mechanism that allows multiple versions of an [item](#) to simultaneously exist in the Oracle Portal schema of the [Oracle Metadata Repository](#). This feature is useful for tracking document changes from one version to the next or for reverting to a previous version if necessary.

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 mode

The runtime view of a [page](#).

Contrast with [Edit mode](#).

View privileges

A privilege level on an [Oracle Instant Portal](#) page that allows the user to view content on the page. All users may navigate pages, select items for the [Favorite Content area](#) of the home page, and search for content.

virtual private database

See [VPD](#).

virtual private portal

Features for hosting multiple companies or multiple organizations securely within the same portal instance.

VPD

Virtual Private Database. A feature for [ASPs](#) that want to leverage the Oracle database to host their customers. Essentially, it uses one physical database instance for all customers, but to each customer it looks as if they have their own database. Users cannot see any information that is not meant for them and complete customer isolation is achieved. It requires little to no changes in the core application to take effect as most of the work is done at the database level. Implementing VPD basically requires two key steps: adding a context column (for example, company name) to all the database tables, and implementing a policy to restrict queries on each table based on the context of the logged in user. VPD provides highly secure, full subscriber isolation using this method.

WAP

Wireless Application Protocol. A set of open, global protocols for developing applications and services that use wireless networks.

Web Cache

See [Oracle Web Cache](#).

Web clipping

A feature that enables page designers to collect Web content into a single centralized portal. It can be used to consolidate content from hundreds of different Web sites scattered throughout a large organization.

WebDAV

Web-based Distributed Authoring and Versioning. A protocol extension to [HTTP](#) 1.1 that supports distributed authoring and versioning. With WebDAV, the Internet

becomes a transparent read and write medium, where content can be checked out, edited, and checked in to a [URL](#) address.

Web Services for Remote Portlets

See [WSRP](#).

Web provider

An entity that is called, using an [HTTP](#) request, by Oracle Portal and returns [portlet](#) content in [HTML](#), [XML](#), or [WSRP](#). A Web provider acts as a proxy for one or more portlets that are defined within a particular application environment (for example, Java, ASP, or Perl) and executed as applications external to Oracle Portal. Web providers are particularly appropriate for Web-accessible information sources.

See also [provider](#). Contrast with [database provider](#).

Web server

A program that delivers Web pages.

Wireless Application Protocol

See [WAP](#).

Wireless Markup Language

See [WML](#).

wireless portal

A [portal](#) accessible from wireless devices, such as cellular telephones.

See also [Oracle Application Server Wireless](#).

wizard

A graphical interface that guides a user step-by-step through a process. In Oracle Portal, wizards are used for creating [database providers](#), [portlets](#), database [objects](#), [pages](#), [page groups](#), and [items](#).

WML

Wireless Markup Language. An [XML](#)-based markup language used to define hypertext-like content and applications for handheld devices.

WSRP

Web Services for Remote Portlets (WSRP). A Web services standard that allows the plug-and-play of visual, user-facing Web services with portals or other intermediary Web applications. Being a standard, WSRP enables interoperability between a standards-enabled container based on a particular language (such as JSR 168, .NET, Perl) and any WSRP portal. So, a portlet (regardless of language) deployed to a WSRP-enabled container can be rendered on any portal that supports this standard.

XML

Extensible Markup Language. An open standard for describing data using a subset of the SGML syntax.

XML portlet

An Oracle Portal [portlet](#) that displays the executed results of [XML](#) code. To create the portlet, you either specify XML code or a [URL](#) that points to the XML code.

XSL

Extensible Stylesheet Language. The language used within stylesheets to transform or render XML documents.

zip file item

A type of **item** that a user can add to a **page**. Zip file items enable you to upload many files in a single operation. You can use them to migrate the contents of a file system or Web site into the Oracle Portal schema of the **Oracle Metadata Repository**. When you upload a zip file to Oracle Portal, then unzip the uploaded file, a page is created for each directory and an item is created for each file. The items are published in the target page.

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