

Oracle® Fusion Middleware

Guide to Publishing Oracle Business Intelligence Discoverer
Portlets

11g Release 1 (11.1.1)

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This document describes how to publish Discoverer portlets
to Oracle Portal, by using Discoverer Portlet Provider.

Oracle Fusion Middleware Guide to Publishing Oracle Business Intelligence Discoverer Portlets 11g Release 1 (11.1.1)

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Contents

Preface	v
Intended Audience.....	v
Documentation Accessibility	v
Oracle BI Discoverer Keyboard Navigation.....	vi
Related Documents	vi
Conventions	vi
JGoodies License Agreement.....	vi
1 Introducing Oracle BI Discoverer and Oracle Portal	
What is Oracle Business Intelligence Discoverer?	1-1
What is a Discoverer workbook?.....	1-2
What is a Discoverer Portlet?	1-2
What is Discoverer Portlet Provider?	1-2
What are the different types of Discoverer portlet?	1-3
About the Discoverer Worksheet portlet.....	1-3
About the Discoverer Gauges portlet.....	1-4
About the Discoverer List of Worksheets portlet.....	1-5
What is Oracle Portal?	1-5
About Publishing Discoverer portlets in Oracle Portal pages	1-6
What are the prerequisite tasks for publishing Discoverer portlets in Oracle Portal?	1-7
Setting up Discoverer WSRP Portlet Preference Store for High Availability.....	1-9
How to Publish Discoverer Portlets in Oracle Portal.....	1-9
What are Discoverer connections?	1-9
2 Setting up Discoverer Portlet Provider in Oracle Portal	
What are the schemas that Discoverer Portlet Provider uses?.....	2-1
How to register Discoverer Portlet Provider with Oracle Portal.....	2-1
How to register Discoverer PDK-Java Portlet Provider with Oracle Portal.....	2-2
How to register Discoverer WSRP Portlet Provider with Oracle Portal.....	2-4
How to edit Discoverer Portlet Provider after it has been registered with Oracle Portal.....	2-5
Notes about changing the default performance settings for Discoverer.....	2-6
About copying Discoverer portlets from one Discoverer installation to another	2-6
How to copy Discoverer portlets from one Discoverer installation to another	2-6
How to copy Discoverer connections from one Discoverer installation to another	2-14
3 Authoring Oracle Portal Pages with Discoverer Portlets	
Pre-requisites for publishing Discoverer worksheets in Oracle Portal.....	3-1
How to connect to Oracle Portal and display the Add Portlets page	3-2
How to add a Discoverer List of Worksheets portlet to an Oracle Portal page	3-4
How to add a Discoverer Worksheet portlet to an Oracle Portal page.....	3-5
How to add a Discoverer Gauges portlet to an Oracle Portal page	3-7

How to edit a Discoverer portlet	3-8
How to customize a Discoverer portlet using Discoverer Portlet Provider	3-9
How to customize the Discoverer worksheet shown in a portlet in Viewer, using the Analyze link	3-10
Notes about resizing graphs in Discoverer Worksheet portlets.....	3-11
Notes about using worksheet parameters in Discoverer portlets.....	3-13
How to map worksheet parameters to Page Parameters in Oracle Portal	3-14
How to map worksheet parameters to Generic Page Parameters	3-15
How to create a Page Parameter	3-16
How to map a Generic Page Parameter to a Page Parameter.....	3-18
How to add Simple Parameter Form portlets to an Oracle Portal page.....	3-20
Notes about publishing Discoverer content in portlets	3-22
About choosing database connections for Discoverer portlets	3-22
About choosing refresh options for Discoverer portlets	3-25
About Discoverer connections and Single Sign-On.....	3-26

4 Using Discoverer Portlets in Oracle Portal

About using Oracle Portal as a personalization framework for Discoverer.....	4-1
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A Publishing Discoverer Worksheets in Oracle WebCenter

B Publishing Discoverer Worksheets in Oracle WebLogic Portal

Index

Preface

Use this guide if you want to know how to:

- Register Discoverer Portlet Provider with Oracle Portal
- Publish Discoverer portlets in Oracle Portal pages
- Edit Discoverer portlets in Oracle Portal pages
- Publish Discoverer portlets in Oracle WebCenter and Oracle WebLogic Portal

Intended Audience

This guide is intended for those users who want to publish Discoverer content in Oracle Portal pages.

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Oracle BI Discoverer Keyboard Navigation

Oracle BI Discoverer supports standard keyboard navigation. Standard keyboard navigation includes the use of the tab key, mnemonics (using the Alt key and the underlined character), and accelerators (such as Alt+F4 to exit a window).

Related Documents

You can access the documents referenced in this guide, and other information about Oracle Business Intelligence (for example, whitepapers, best practices, documentation updates, other collateral) on Oracle Technology Network at:

<http://www.oracle.com/technology>

Conventions

Conventions used in this manual are shown in the table below:

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.
< >	Angle brackets enclose user-supplied names or values.
[]	Square brackets enclose optional clauses from which you can choose one or none.
Menu name Command	Text in this format conveys a sequence of menu choices (for example, choose the menu, then the command under that menu)

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Introducing Oracle BI Discoverer and Oracle Portal

Oracle BI Discoverer allows you to publish Discoverer Worksheet content on various Portals, such as Oracle Portal, Oracle WebCenter and Oracle WebLogic Portal.

This chapter introduces you to Oracle BI Discoverer and Oracle Portal and contains the following topics:

- "What is Oracle Business Intelligence Discoverer?"
- "What is a Discoverer workbook?"
- "What is a Discoverer Portlet?"
- "What is Discoverer Portlet Provider?"
- "What are the different types of Discoverer portlet?"
- "What is Oracle Portal?"
- "About Publishing Discoverer portlets in Oracle Portal pages"
- "What are the prerequisite tasks for publishing Discoverer portlets in Oracle Portal?"
- "Setting up Discoverer WSRP Portlet Preference Store for High Availability"
- "What are Discoverer connections?"

What is Oracle Business Intelligence Discoverer?

Oracle Business Intelligence Discoverer is an intuitive ad-hoc query, reporting, analysis, and Web publishing toolset that gives business users immediate access to information in databases.

Oracle Business Intelligence Discoverer enables business users at all levels of the organization to make faster and more informed business decisions. Using any standard Web browser, you have secure and immediate access to data from both relational and multidimensional data sources. Oracle Business Intelligence Discoverer provides a business view to hide the complexity of the underlying data structures, enabling you to focus on solving business problems.

Oracle Business Intelligence Discoverer comprises several integrated components that work with the Oracle database to give you a complete and integrated Business Intelligence solution.

What is a Discoverer workbook?

A Discoverer workbook is simply a named collection of worksheets. Each worksheet contains the data and graphs that you require to extract business information from the database. Each worksheet contains the result of a query.

Worksheets can show information:

- As data points in cells (formatted as tables or as crosstabs)
- As graphs (Oracle BI Discoverer supports many different graph types)

You use Discoverer Portlet Provider to enable Discoverer worksheets to be accessed by Oracle Portal users.

What is a Discoverer Portlet?

Portlets are reusable information components that summarize or provide access to different types of information sources. You can customize the appearance of portlets on a per user or per group basis.

Discoverer portlet can be used to link a portal to an existing Discoverer worksheet. Discoverer provides two types of portlets:

1. Discoverer PDK-Java portlets - These portlets are created based on Oracle Portal Developer Kit-Java (PDK-Java) and they can be published only in Oracle Portal and Oracle WebCenter Spaces.
2. Discoverer WSRP portlets - These portlets are created based on the Java Portlet Specification (JSR 168) and the portlet provider is available as a WSRP (Web Services for Remote Portlets) application in the Discoverer installation. You can access this WSRP application using a WSDL URL. Discoverer WSRP portlets can be published in any portal that supports WSRP.

For more information about portlet styles available for Discoverer content, see "[What are the different types of Discoverer portlet?](#)".

What is Discoverer Portlet Provider?

Providers act as containers for portlets. Providers manage the portlets they own and handle the communication between the portlets and Oracle Portal.

Discoverer Portlet Provider is a Discoverer component that provides Discoverer portlets for publishing Discoverer content.

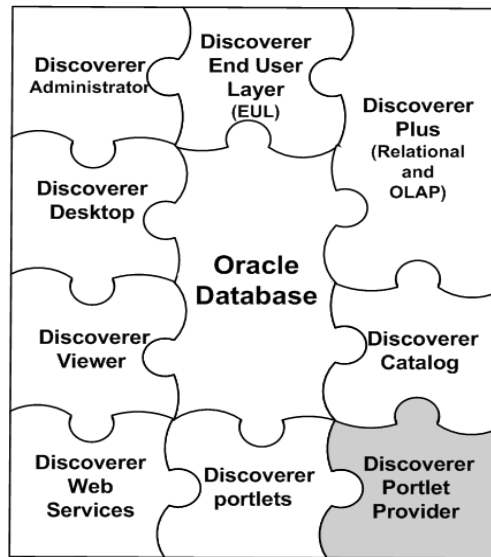
Discoverer Portlet Provider allows publishing Discoverer content in Oracle Portal, Oracle WebLogic Portal, and Oracle WebCenter Spaces.

You can also publish Discoverer portlets on third-party portals such as IBM WebSphere. For more information about registering a portlet producer and adding portlets in WebSphere, see the IBM WebSphere documentation.

Note: WebSphere 6.0 does not support WSRP 2.0. When you register the Discoverer Portlet Provider with IBM WebSphere, use the registration URL for WSRP 1.0 as follows:

`http://host:port/discoverer/portlets/wsrp1?WSDL`

Figure 1–1 Discoverer Portlet Provider in relation to the Oracle BI Discoverer components

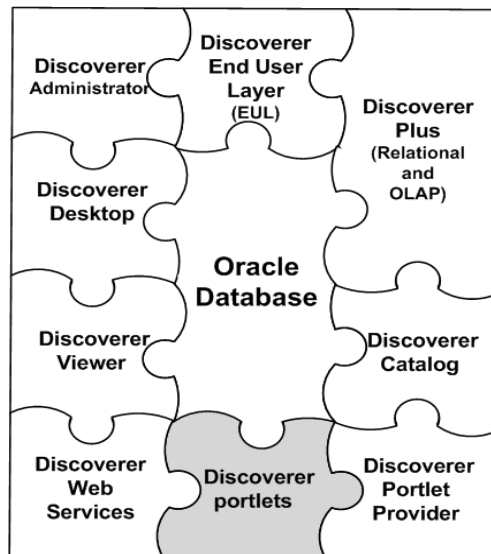


What are the different types of Discoverer portlet?

The following Discoverer portlets can be published in a portal:

- Worksheet portlet (for more information, see ["About the Discoverer Worksheet portlet"](#))
- Gauges portlet (for more information, see ["About the Discoverer Gauges portlet"](#))
- List of Worksheets portlet (for more information, see ["About the Discoverer List of Worksheets portlet"](#))

Figure 1–2 Discoverer portlets in relation to the Oracle BI Discoverer components



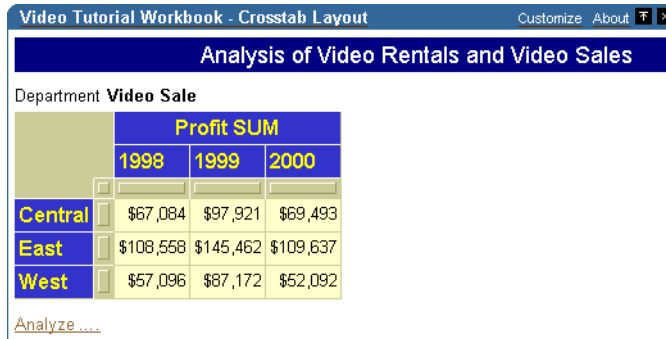
About the Discoverer Worksheet portlet

A Discoverer Worksheet portlet can contain a Discoverer worksheet and a graph.

The portlet publisher can include a link in the portlet (called Analyze) to enable users to open the worksheet in Discoverer Viewer for more detailed analysis (for example, drill, pivot).

In the figure below, the worksheet portlet called Video Tutorial Workbook - Crosstab Layout contains a Discoverer worksheet for analyzing profit figures for regions over time.

Figure 1–3 A Discoverer Worksheet portlet



The screenshot shows a web browser window with the title 'Video Tutorial Workbook - Crosstab Layout'. The main content area is titled 'Analysis of Video Rentals and Video Sales'. Below the title, there is a dropdown menu for 'Department' set to 'Video Sale'. The main data is presented in a crosstab table with 'Profit SUM' as the column header and years '1998', '1999', and '2000' as the row headers. The rows represent regions: 'Central', 'East', and 'West'. Each cell in the table contains a profit value. At the bottom of the table, there is a link labeled 'Analyze...'. The table data is as follows:

	Profit SUM		
	1998	1999	2000
Central	\$67,084	\$97,921	\$69,493
East	\$108,558	\$145,462	\$109,637
West	\$57,096	\$87,172	\$52,092

For more information, see ["How to add a Discoverer Worksheet portlet to an Oracle Portal page"](#).

About the Discoverer Gauges portlet

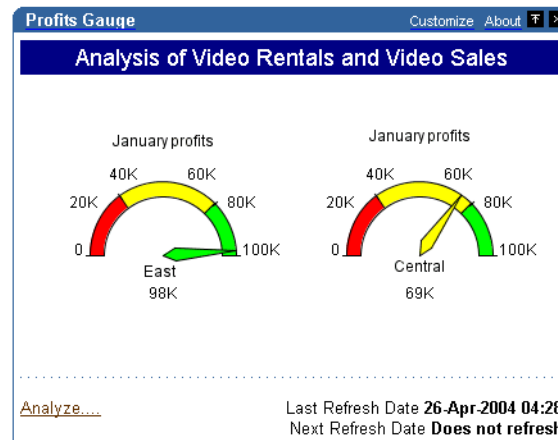
A Discoverer Gauges portlet contains Discoverer worksheet data displayed as one or more semi-circular gauges. The gauges have a similar appearance to a speedometer. A gauge is a way of visualizing data within a range of values.

Discoverer Gauges portlets can only be created for crosstab worksheets.

It is possible to define low, acceptable, and high thresholds. The value ranges reflect key performance indicators (KPIs) for a business. Gauges are commonly used in dashboard applications.

The portlet publisher can include a link in the portlet (called Analyze) to enable users to open the worksheet in Discoverer Viewer for more detailed analysis (for example, drill, pivot).

The figure below shows a Discoverer Gauges portlet containing two gauges that display monthly profit sum values for East and Central regions.

Figure 1–4 Discoverer Gauges portlet displayed in an Oracle Portal page

For more information, see ["How to add a Discoverer Gauges portlet to an Oracle Portal page"](#).

About the Discoverer List of Worksheets portlet

A Discoverer List of Worksheets portlet contains links to Discoverer worksheets. When you click a link in a List of Worksheets portlet, you open the selected worksheet in Discoverer Viewer.

In the figure below, the Discoverer List of Worksheets portlet contains links to worksheets in the Video Tutorial Workbook (for example, Tabular Layout, Crosstab Layout).

Figure 1–5 A Discoverer List of Worksheets portlet

Focus Name	Type	Owner	Modification Date	Creation Date
▼ MY DRAKE STD				
▶ Analytic Function Examples	Workbook	VIDEO5	07-Jan-2004 10:21	07-Jan-2004 10:21
▶ Video Tutorial Workbook	Workbook	VIDEO5	07-Jan-2004 10:21	07-Jan-2004 10:21
▶ Tabular Layout	Table	VIDEO5	07-Jan-2004 10:21	07-Jan-2004 10:21
▶ Crosstab Layout	Crosstab	VIDEO5	07-Jan-2004 10:21	07-Jan-2004 10:21

For more information, see ["How to add a Discoverer List of Worksheets portlet to an Oracle Portal page"](#).

What is Oracle Portal?

Oracle Portal is a component of Oracle Fusion Middleware that is used for the development, deployment, administration, and configuration of enterprise-class portals. Oracle Portal incorporates a portal-building framework with self-service publishing features that enable you to create, publish, and manage information within your portal. Your portal can publish information from your database and other

sources, provide and gather information from internal and external customers, and manage the content they consume.

A portal is made up of groups of pages hosting many different types of content that come from many different sources, all presented from a single location, the portal. The basic structural components of a portal built with Oracle Portal include page groups, pages, tabs, regions, portlets, and items.

About Publishing Discoverer portlets in Oracle Portal pages

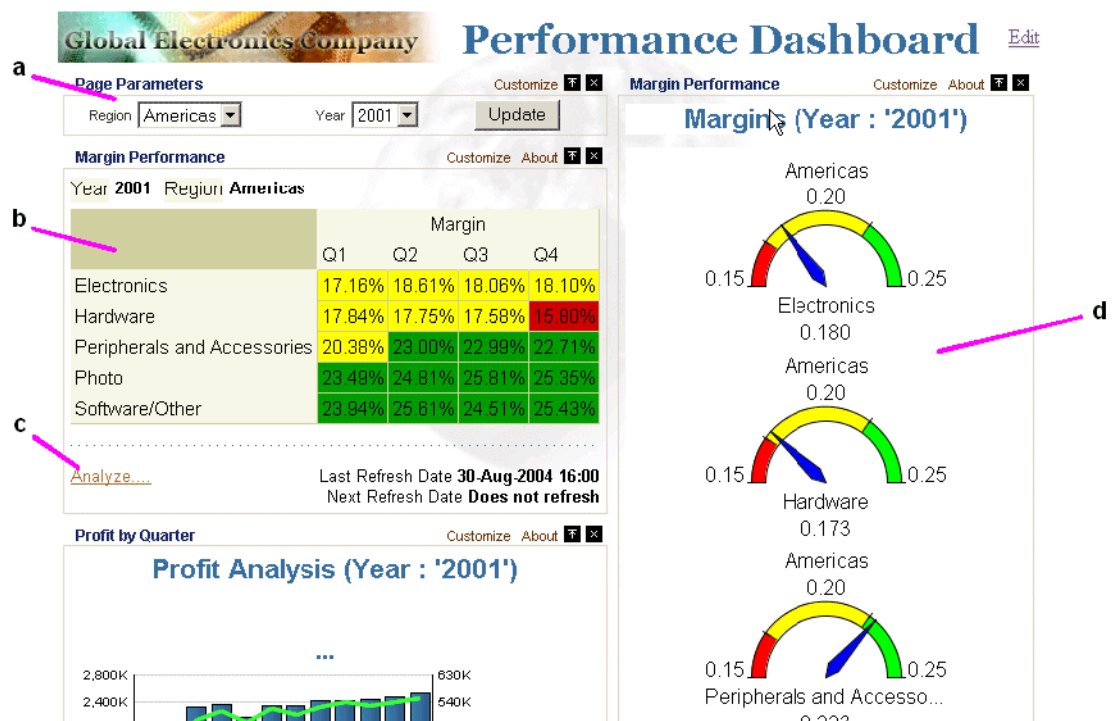
You can integrate Discoverer portlets in Oracle Portal pages using Discoverer Portlet Provider. Discoverer Portlet Provider is a Discoverer component that provides the Discoverer portlets for publishing Discoverer content in Portal pages.

If you have created a Discoverer worksheet in Discoverer Plus Relational, Discoverer Plus OLAP, or Discoverer Desktop, Oracle Portal makes it easy to publish the worksheet to a portal community.

For more information about portlet types available for Discoverer content, see ["What are the different types of Discoverer portlet?"](#).

The figure below shows a page in Oracle Portal containing Discoverer portlets.

Figure 1-6 An example Oracle Portal page including a Simple Parameter Form portlet, Discoverer Worksheet portlets and a Gauges portlet



Key to figure:

- a. A Simple Parameter Form portlet.
- b. A Discoverer Worksheet portlet.
- c. An Analyze link that displays the worksheet in Discoverer Viewer. Displaying this link is optional.
- d. A Discoverer Gauges portlet.

There are several benefits that are available when you use Discoverer with Oracle Portal:

- Display multiple crosstabs, tables and graphs from multiple datasources on a single page

Discoverer Portlet Provider is the Discoverer component that enables you to put multiple presentations (crosstabs, tables, graphs) on one page. These presentations can be either from relational or OLAP datasources. Discoverer Portlet Provider also provides an additional visualization - Gauges which is not available elsewhere in Discoverer.

- Control portlets through common portal page parameters

Not only can you put multiple presentations on one page, but you can also have all of these presentations driven by a common set of Portal Page-level parameters.

- Caching

Discoverer Portlets provide results instantaneously, since they run the queries on a schedule in the background and cache the data for instant display.

- Security enables greater control over what the user can see

With Discoverer portlets you can create one portal page and show different results to different users. The data can be striped either by DB users or by OracleAS Single Sign-On users in the database.

- Personalization

Discoverer portlets can also be personalized individually by users either through the Customization pages or by clicking the Analyze link.

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

What are the prerequisite tasks for publishing Discoverer portlets in Oracle Portal?

The prerequisite tasks for publishing Discoverer portlets in Oracle Portal are provided in the following list:

- **Install Oracle Portal and Oracle BI Discoverer.**

For more information, see *Oracle Fusion Middleware Installation Planning Guide* and *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

- **Install the schemas that Discoverer Portlet Provider requires.**

Discoverer Portlet Provider requires that the `<user-prefix>_DISCOVERER` and `<user-prefix>_DISCOVERER_PS` schemas be installed using the Repository Creation Utility (RCU).

For more information, see *Oracle Fusion Middleware Installation Planning Guide* and *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

- **Register Discoverer Portlet Provider.**

To publish Discoverer portlets on various portals, you must first register the portlet provider with respective portals.

Discoverer Portlet Provider is registered in Oracle Portal by the Oracle Fusion Middleware administrator. For more information, see ["How to register Discoverer PDK-Java Portlet Provider with Oracle Portal"](#) and ["How to register Discoverer WSRP Portlet Provider with Oracle Portal"](#).

For more information about registering Discoverer portlets on Oracle WebCenter, see [Appendix A, "Publishing Discoverer Worksheets in Oracle WebCenter."](#)

For more information about registering Discoverer portlets on Oracle WebLogic Portal, see [Appendix B, "Publishing Discoverer Worksheets in Oracle WebLogic Portal."](#)

- **Create a Discoverer worksheet.**

Discoverer worksheets are created by Discoverer Plus or Discoverer Desktop end users.

Note: Before you can create a Discoverer worksheet the following tasks must have been completed:

- Create Metadata (EUL or Discoverer Catalog).

EUL Metadata is created in Oracle Discoverer Administrator by the Discoverer manager. The Discoverer Catalog Metadata is installed in Oracle Fusion Middleware Control by the administrator.

For more information, see *Oracle Fusion Middleware Administrator's Guide for Oracle Business Intelligence Discoverer* and *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

- Create a public or a private connection.

Public connections are created in Oracle Fusion Middleware Control by the Discoverer manager. Private connections are created in Discoverer Plus and Discoverer Viewer by end users. For more information, see:

- * *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*
- * *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Plus*
- * *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Viewer*

- **Add Discoverer portlets.**

Discoverer portlets are added in the portal, typically by Discoverer Plus and Discoverer Viewer end users.

For more information about adding Discoverer portlets on Oracle Portal, see [Chapter 3, "Authoring Oracle Portal Pages with Discoverer Portlets"](#).

For more information about adding Discoverer portlets on Oracle WebCenter, see [Appendix A, "Publishing Discoverer Worksheets in Oracle WebCenter."](#)

For more information about adding Discoverer portlets on Oracle WebLogic Portal, see [Appendix B, "Publishing Discoverer Worksheets in Oracle WebLogic Portal."](#)

Note: For information about upgrading a 9.0.4 metadata repository to work with Discoverer Portlet Provider Version 10.12 or 11.1.1.1.0 and Oracle Portal 10.1.2 or 11.1.1.1.0, see *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

Setting up Discoverer WSRP Portlet Preference Store for High Availability

The portlet preference store is used for persisting consumer registration handles and portlet preference data.

In a clustered environment, to make the Discoverer WSRP portlet preference store accessible to all Discoverer instances, you must set the value of the `discoWsrpPrefStoreSharedPath` variable to a shared path in the Discoverer application deployment plan. For more information, see the "Setting up Discoverer WSRP Portlet Producer in a Clustered Environment" section in *Oracle Fusion Middleware High Availability Guide*.

How to Publish Discoverer Portlets in Oracle Portal

To publish Discoverer portlets in Oracle Portal, do the following:

1. (Optional) Ensure that Discoverer Portlet Provider is installed correctly.

To verify a Discoverer PDK-Java Portlet Provider installation, enter the following URL in an Internet browser:

```
http://<host.domain>:<port>/discoverer/portletprovider/
```

If Discoverer Portlet Provider is installed correctly, you see the PDK-Java test page, displaying the message 'Congratulations! You have successfully reached your Provider's Test Page'. The test page also lists the Discoverer portlet types available.

To verify a Discoverer WSRP Portlet Provider installation, enter the following URL in an Internet browser:

```
http://host:port/discoverer/portlets/WSRPservice_version?WSDL
```

For example: `http://myserver:80/discoverer/portlets/wsrp2?WSDL`

2. Register Discoverer Portlet Provider with Oracle Portal. For more information, see [How to register Discoverer Portlet Provider with Oracle Portal](#).

This step only needs to be performed once (after installation). Typically, Oracle Fusion Middleware administrators register the Discoverer Portlet Provider.

3. Use Oracle Portal to add Discoverer portlets to portal pages (for more information, see [Chapter 3, "Authoring Oracle Portal Pages with Discoverer Portlets."](#))

Typically, a portal page designer would add Discoverer portlets to portal pages.

What are Discoverer connections?

A Discoverer connection is a stored set of database login details that comprises the following items:

- A database user name - to identify the Discoverer end user
- A database password - to authenticate the Discoverer end user
- A database name - to specify the database containing the information that the Discoverer end user wants to analyze
- (optional) An Oracle Applications Responsibility - to specify a Discoverer end user's responsibility when using Discoverer with Oracle Applications
- (relational data source only) An EUL - to specify the End User Layer to be used
- A language - to specify the language to use in Discoverer

Discoverer connections enable end users to start Discoverer without having to reenter database login details each time they start Discoverer. Discoverer connections and related information are stored in the DISCOVERER_PS schema.

If you have used Oracle's Single Sign-On functionality to establish a database connection, you are not prompted for password information when you start Discoverer.

You must know about Discoverer connections because a connection must exist before you can publish Discoverer data in a Discoverer portlet (for more information, see [Chapter 3, "Authoring Oracle Portal Pages with Discoverer Portlets"](#)).

Setting up Discoverer Portlet Provider in Oracle Portal

This chapter explains how to set up Discoverer Portlet Provider in Oracle Portal, and contains the following topics:

- ["What are the schemas that Discoverer Portlet Provider uses?"](#)
- ["How to register Discoverer Portlet Provider with Oracle Portal"](#)
- ["How to edit Discoverer Portlet Provider after it has been registered with Oracle Portal"](#)
- ["Notes about changing the default performance settings for Discoverer"](#)
- ["About copying Discoverer portlets from one Discoverer installation to another"](#)

What are the schemas that Discoverer Portlet Provider uses?

Discoverer uses the following two database schemas to allow users to display Discoverer content in Oracle Portal:

- `<user-prefix>_DISCOVERER_PS`: This schema stores Discoverer connections and related information. Connections enable end users to start Discoverer without having to enter database login details each time they start Discoverer.
- `<user-prefix>_DISCOVERER`: This schema stores portlet metadata such as cache and customization information.

How to register Discoverer Portlet Provider with Oracle Portal

You must register Discoverer Portlet Provider with Oracle Portal before you can publish Discoverer worksheets in Oracle Portal pages. You can only register Discoverer Portlet Provider with Oracle Portal once. The following sections describe the procedure to register Discoverer Portlet Provider with Oracle Portal:

- ["How to register Discoverer PDK-Java Portlet Provider with Oracle Portal"](#)
- ["How to register Discoverer WSRP Portlet Provider with Oracle Portal"](#)

When you have registered Discoverer Portlet Provider with Oracle Portal you can then publish Discoverer portlets in Oracle Portal pages. For more information, see [Chapter 3, "Authoring Oracle Portal Pages with Discoverer Portlets."](#)

How to register Discoverer PDK-Java Portlet Provider with Oracle Portal

You register Discoverer Portlet Provider to enable Oracle Portal end users to add Discoverer business intelligence portlets to their portal pages.

To register Discoverer PDK-Java Portlet Provider with Oracle Portal:

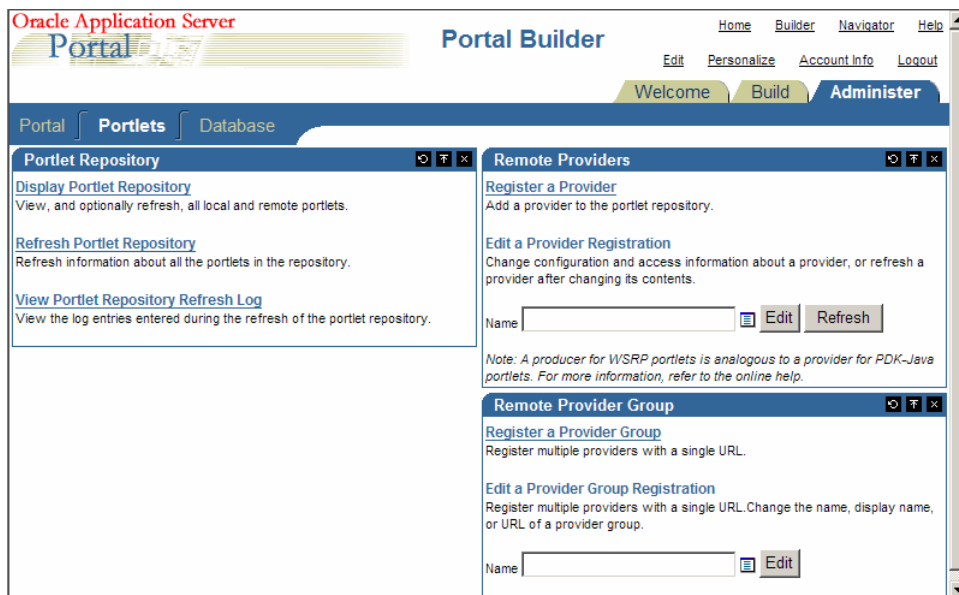
1. Start a Web browser and enter the URL for Oracle Portal.

For example:

`http://<host.domain>:<port>/portal/pls/portal`

For more information about displaying the Oracle Portal main page, contact the Oracle Portal administrator.

2. Click **Login** and connect as a Portal administrator.
3. Select the **Administer** tab.
4. Select the **Portlets** subtab.



5. In the **Remote Providers** pane, click **Register a Provider**.
The **Register Provider** page is displayed.

6. Enter the Discoverer Portlet Provider details.

You can enter any name and display name for the Discoverer Portlet Provider. The name and display name can be different.

Hint: Give the Portlet Provider a useful display name because users see this name when they add a Discoverer portlet to a portal page.

7. Select **Web** from the **Implementation Style** list.

8. Click **Next**.

The **General Properties** page is displayed.

9. Enter the Portlet Provider general properties as follows:

- a. Enter the URL of the Discoverer Portlet Provider in the **URL** field, in the form:


```
http://host:port/discoverer/portletprovider
```

For example: `http://myserver:80/discoverer/portletprovider`

- b. Clear the **Web Provider in same cookie domain as the portal** check box.
Note: This check box should be selected when multiple Oracle Portal installations are clustered together through Oracle Web Cache. This setting allows for cookie session binding and for the synchronization of Oracle Portal and Web Cache installations.
- c. Select the **The user has the same identity in the Web providers application as in the Single Sign-On identity** option.
- d. In the **User/Session Information** area, select the **User** option, and select the **Once Per User Session** option from the **Login Frequency** field.

Note: Do not change the default value of the other fields.

10. Click Finish.

The Discoverer portlet provider is now registered, and you can add portlets to an Oracle Portal page.

You can change the default access control settings by editing the provider registration, as described in [Section , "How to edit Discoverer Portlet Provider after it has been registered with Oracle Portal."](#)

Note: If you want Discoverer end users to publish workbooks and worksheets using a public connection, use Oracle Fusion Middleware Control to create the public connection. For more information about creating public connections, see the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

How to register Discoverer WSRP Portlet Provider with Oracle Portal

You register Discoverer Portlet Provider to enable Oracle Portal end users to add Discoverer business intelligence portlets to their portal pages.

To register Discoverer PDK-Java Portlet Provider with Oracle Portal:

1. Start a Web browser and enter the URL for Oracle Portal.

For example:

`http://<host.domain>:<port>/portal/pls/portal`

For more information about displaying the Oracle Portal main page, contact the Oracle Portal administrator.

2. Click **Login** and connect as a Portal administrator.
3. Select the **Administer** tab.
4. Select the **Portlets** subtab.
5. In the **Remote Providers** pane, click **Register a Provider**.

The **Register Provider** page is displayed.

6. Enter the Discoverer Portlet Provider details.

You can enter any name and display name for the Discoverer Portlet Provider. The name and display name can be different.

Hint: Give the Portlet Provider a useful display name because users see this name when they add a Discoverer portlet to a portal page.

7. Select **WSRP** from the **Implementation Style** list.
8. Click **Next**.

The **Define Connection** page is displayed.

9. Enter the URL of the Discoverer Portlet Provider in the **URL** field, in the form:

```
http://host:port/discoverer/portlets/WSRPservice_version?WSDL
```

For example: `http://myserver:80/discoverer/portlets/wsrp2?WSDL`
10. Provide any registration properties required by the provider on the Registration Property Values page and click **Finish**.

The Discoverer portlet provider is now registered, and you can add portlets to an Oracle Portal page.

How to edit Discoverer Portlet Provider after it has been registered with Oracle Portal

You edit the Discoverer Portlet Provider when you want to change the way that it works. For example, you might want to change the Discoverer Portlet Provider display name or to change the access settings.

To edit a registered Discoverer Portlet Provider:

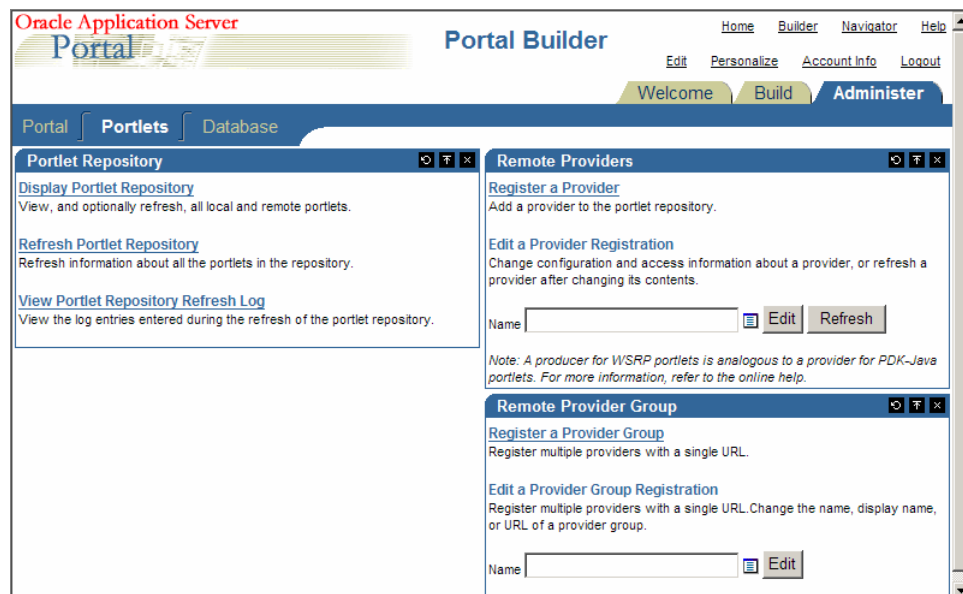
1. Start a Web browser and enter the URL for the Oracle Portal main page.

For example:

```
http://<host.domain>:<port>/portal/pls/portal
```

For more information about displaying the Oracle Portal main page, contact the Oracle Portal administrator.

2. Select the **Administer** tab.
3. Select the **Portlets** subtab.



4. In the **Remote Providers** pane, enter the name of the Discoverer Portlet Provider (that is, its display name) in the **Name** field, and click **Edit** to display the Provider Information page.

Hint: If you are not sure of the display name of the Discoverer Portlet Provider, do the following:

- a. Click the **Browse Providers** icon to the right of the **Name** field.
- b. Choose the Discoverer Portlet Provider name from the list of Portlet Providers displayed.

Hint: The name that you choose is the display name that was specified when you registered the Discoverer Portlet Provider (for more information, see ["How to register Discoverer Portlet Provider with Oracle Portal"](#)).

- c. Click **Edit**.

The **Edit Portlet Provider** page is displayed.

5. Make the necessary changes, as follows:
 - Use the **Main** tab to change provider information (for example, the display name of the Discoverer Portlet Provider).
 - Use the **Connection** tab to change general properties (for example, the URL of the Discoverer Portlet Provider).
 - Use the **Access** tab to grant access to additional users or groups and to define access privileges for users and groups.
6. Click **OK** to save the changes you have made.

The Discoverer Portlet Provider is updated according to changes you have made.

Notes about changing the default performance settings for Discoverer

You might want to change the default performance settings for Discoverer to improve Discoverer performance.

For more information about changing the default performance settings for Discoverer, see the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*.

About copying Discoverer portlets from one Discoverer installation to another

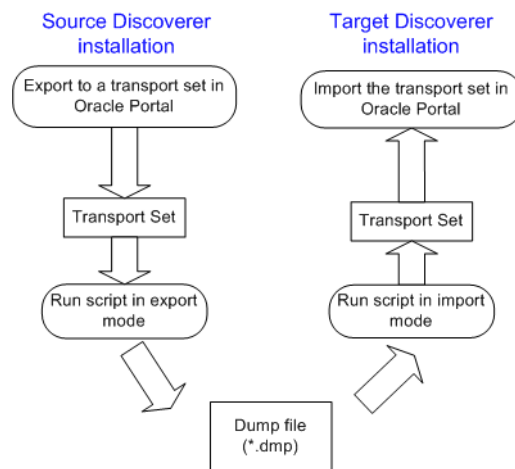
After you have installed Oracle Business Intelligence, you might want to deploy existing Discoverer portlets created on a different Oracle Portal installation. To deploy existing Discoverer portlets, you copy the portal pages and portlets to the new Discoverer installation.

How to copy Discoverer portlets from one Discoverer installation to another

You copy Discoverer portlets using Oracle Portal's export and import facilities for transport sets. A transport set is a collection of portal objects for export.

Note: Before you copy Discoverer portlets, you must first copy any Discoverer connections used by the portlets. For more information, see ["How to copy Discoverer connections from one Discoverer installation to another"](#).

The figure below shows the high level steps to copy Discoverer portlets.

Figure 2–1 Copying Discoverer portlets from one Discoverer installation to another

Note: The source and target installations can be on the same machine, or on different machines.

To copy Discoverer portlets from one Discoverer installation to another:

1. Copy any Discoverer connections used by the Discoverer portlets to the target installation (for more information, see ["How to copy Discoverer connections from one Discoverer installation to another"](#)).
2. If the source and target installations are not associated with the same Oracle Internet Directory and with the same two database schema instances that Discoverer requires (the PStore and Portlet Provider schemas), then you must register the new Discoverer Portlet Provider on the target installation with the same name as that used on the source installation.

For example, if the Discoverer Portlet Provider is registered with the name 'Discoverer01' on the source installation, then you must register the new Discoverer Portlet Provider on the target installation with the name 'Discoverer01'.

For more information about registering Discoverer Portlet Provider, see ["How to register Discoverer Portlet Provider with Oracle Portal"](#).

3. On the source installation, connect to Oracle Portal and export a page or page group to a transport set (for more information, see ["How to export Discoverer portlets to a transport set"](#)).

When you export a transport set, Oracle Portal generates a UNIX script and a Windows script that you can run:

- in export mode to copy a transport set to a dump (*.dmp) file
 - in import mode to extract a transport set from a dump (*.dmp) file
4. On the source installation, run the script generated by Oracle Portal in export mode to create a dump (*.dmp) file containing the transport set (for more information, see ["How to create a dump \(*.dmp\) file to copy the Discoverer portlets"](#)).
 5. If the source installation and target installation are on different machines, copy the dump (*.dmp) file, the log file, and the script from the source machine to the target machine.

6. On the target installation, run the script generated by Oracle Portal in import mode to extract the transport set from the dump (*.dmp) file (for more information, see ["How to extract a transport set from a dump \(*.dmp\) file"](#)).
7. On the target installation, connect to Oracle Portal and import the exported page or page group as a transport set (for more information, see ["How to import a transport set into Oracle Portal"](#)).

How to log in to Oracle Portal

You log in to Oracle Portal to enable you to view and edit Oracle Portal content, and perform administrative tasks. For example, you might want to add new portlets to a portal page.

To log in to Oracle Portal:

1. Launch a Web browser.
2. Go to the Oracle Portal main page.
Hint: The web address of the Oracle Portal might be:
 - The default web page that you access when you start a browser
 - An internet address (URL) that you enter in the address field in a browser using syntax similar to that shown in the following example:
`http://machinename.myorganization.com:8090/portal/pls/portal`
 - A link from a portal or other internet or intranet site that you are using
3. Click **Login**.
4. Enter the user name and password of a Single Sign-On user with administrator privileges.

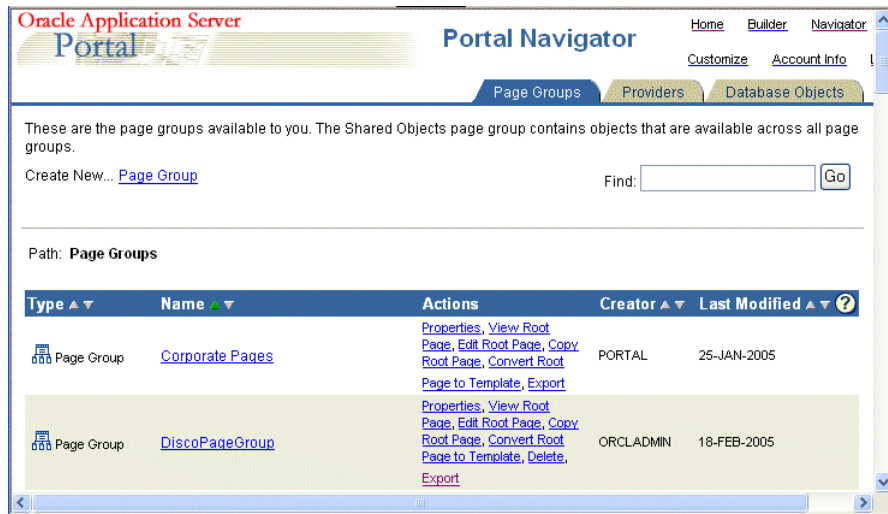
You can now view and edit Oracle Portal content, and perform administrative tasks.

How to export Discoverer portlets to a transport set

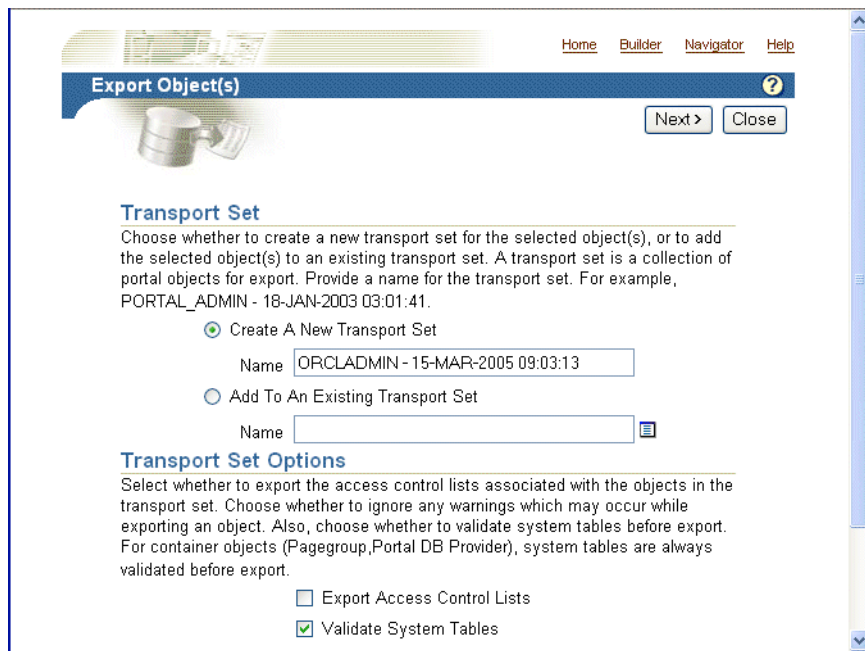
You export Discoverer portlets to a transport set in Oracle Portal to enable you to copy them from one Discoverer installation to a different installation.

To export Discoverer portlets to a transport set:

1. On the source installation, log in to Oracle Portal as a user with administrator privileges (for more information, see ["How to log in to Oracle Portal"](#)).
2. Click the **Navigator** link.
The **Portal Navigator** page is displayed.



3. Select the **Export** link in the **Actions** column next to the name of page or page group that you want to copy, to display the **Export Objects** page.



Do not change the default values of the other fields on this page.

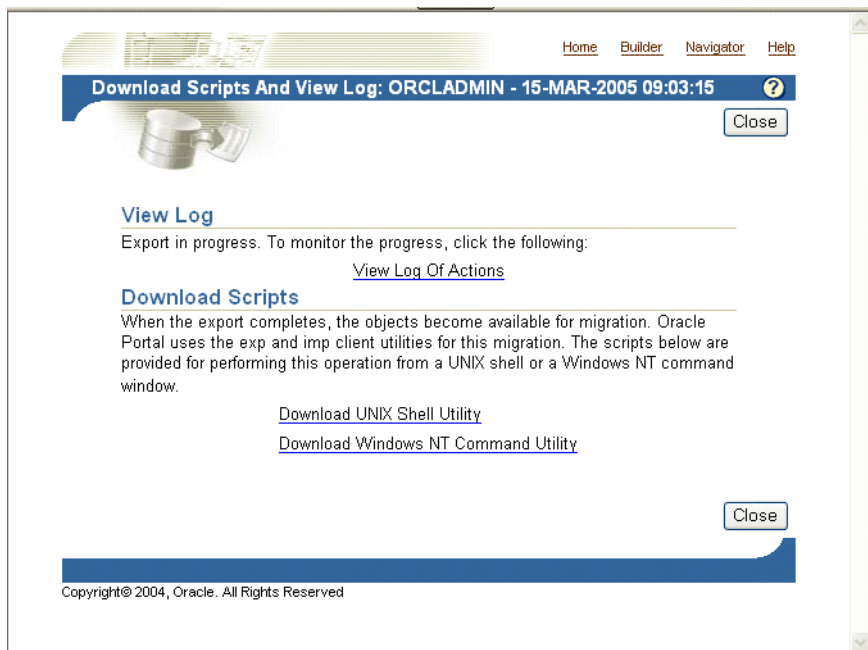
4. Select the **Create A New Transport Set** option.
5. If you want to change the default transport set name, edit the default name in the **Name** field.

The transport set name that you specify is used to identify the transport set in Oracle Portal (for example, if you import or delete it).

6. Click **Next** to display the Transport Set Objects page.



7. In the **Explicitly Selected Objects** table, do one of the following:
 - If the source and target installations are not associated with the same Oracle Internet Directory and with the same two database schema instances that Discoverer requires (the PStore and Portlet Provider schemas), then clear the check box in the **Replace on Import** column
 - If the source and target installations are associated with the same Oracle Internet Directory and with the same two database schema instances that Discoverer requires, then select the check box in the **Replace on Import** column
8. Click Export Now to display the Download Scripts And View Log page.



9. Select the **View Log of Actions** link to monitor the status of the export.
Refresh the browser window until the export is complete. When the export is complete, the log entry 'Completed On: <date and time>' is displayed. Oracle Portal does not display a pop-up message informing you that the export has been completed.
10. Click Close to return to the Download Scripts And View Log page.
11. In the **Download Scripts** area, select the link for the platform you are using to display the script in the browser window.
For example, select the **Download UNIX Shell Utility** link for UNIX platforms.
12. Save the script in the browser (for example, in Internet Explorer, choose File | Save As, and select a file name and location).
13. Click the Back button in the browser to return to the Download Scripts And View Log page
14. Click Close.

You have now exported the Discoverer portlets to a transport set. The next step is to create a dump (*.dmp) file. For more information, see "[How to create a dump \(*.dmp\) file to copy the Discoverer portlets](#)".

How to obtain the PORTAL login password

To run scripts generated by Oracle Portal you need the PORTAL login password for the Oracle infrastructure database. If you do not know the PORTAL login password, use the ldapsearch command to obtain the PORTAL login password.

To obtain the PORTAL login password:

1. At a command prompt, enter the ldapsearch command using the following syntax:

```
ldapsearch -h directory_host_name -p directory_port -D directory_bind_dn
-w directory_bind_dn_password
-b "orclReferenceName=infrastructure_database" "orclresourcename=PORTAL"
orclpasswordattribute
```

For more information about the ldapsearch command, see Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory.

How to create a dump (*.dmp) file to copy the Discoverer portlets

Having exported Discoverer portlets to a transport set, you now run the script generated by Oracle Portal in export mode to create a dump (*.dmp) file.

To create a dump (*.dmp) file to copy the Discoverer portlets:

1. On the source installation, run the script generated by Oracle Portal by entering the following command at the command prompt:

```
<script name> -mode export -s portal -p <PORTAL login password>
-c <database col> -d <*.dmp file>
```

Where:

- <script name> is the name of the script file generated by Oracle Portal (for example, my_script.sh). You specify the script name when you export the transport set.

- <PORTAL login password> is the PORTAL login password for the Oracle Internet Directory. For more information about obtaining the PORTAL login password, see "[How to obtain the PORTAL login password](#)".
- <database TNS alias> is the login details for the Oracle Internet Directory.
- <*.dmp file> is the name you want to give dump file.

For example, if the script is called my_script.sh, you might type:

```
my_script.sh -mode export -s portal -p mypassword -c db1 -d exp.dmp
```

2. If the source installation and target installation are on different machines, copy the dump (*.dmp) file and the generated script to the target machine (for example, by using FTP).

You have now created a dump (*.dmp) file containing the transport set. The next step is to extract the transport set from the dump (*.dmp) file on the Discoverer installation (for more information, see "[How to extract a transport set from a dump \(*.dmp\) file](#)").

How to extract a transport set from a dump (*.dmp) file

Having created a dump (*.dmp) file, you now run the script generated by Oracle Portal in import mode to extract the transport set from the dump (*.dmp) file on the target installation.

To extract a Transport Area from a dump (*.dmp) file:

1. On the target installation, run the script generated by Oracle Portal by entering the following command at the command prompt:

```
<script name> -mode import -s portal -p <PORTAL login password>  
-pu <target portal username> -pp <password of target portal user>  
-company none -c <database TNS alias> -d <*.dmp file>
```

Where:

- <script name> is the name of the script file generated by Oracle Portal (for example, my_script.sh). You specify the script name when you export the transport set.
- <PORTAL login password> is the PORTAL login password for the Oracle Internet Directory. For more information about obtaining the PORTAL login password, see "[How to obtain the PORTAL login password](#)".
- <database TNS alias> is the login details for the Oracle Fusion Middleware database.
- <*.dmp file> is the name of the dump file containing the transport set.

For example, if the export file is called my_script.sh, you might type:

```
my_script.sh -mode import -s portal -p mypassword -pu orcladmin  
-pp adminpassword -company none -c db1 -d exp.dmp
```

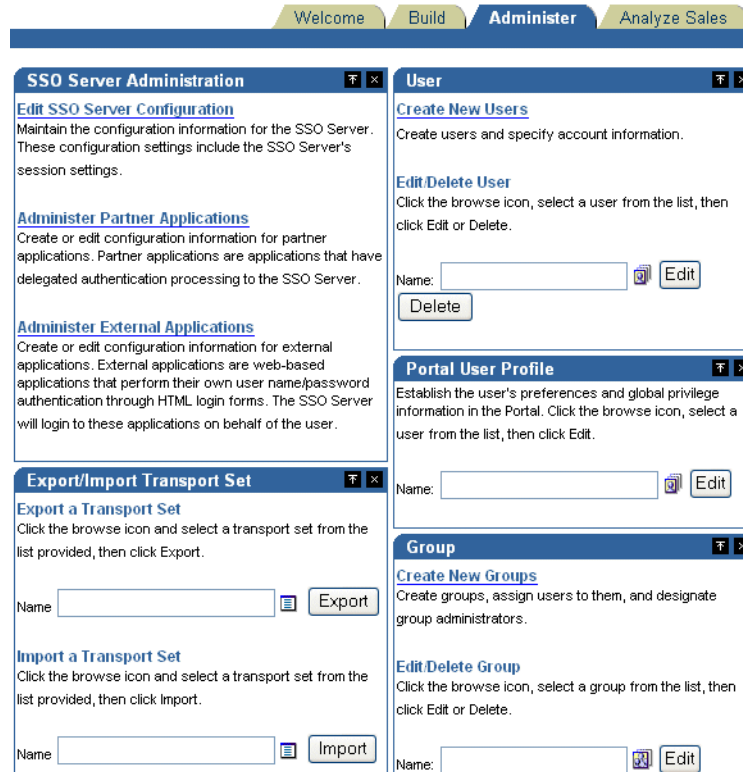
You have now extracted the transport set from the dump (*.dmp) file. The next step is to import the transport set into Oracle Portal (for more information, see "[How to import a transport set into Oracle Portal](#)").

How to import a transport set into Oracle Portal

Having extracted a transport set from a dump (*.dmp) file, the next step is to import the Discoverer portlets in Oracle Portal.

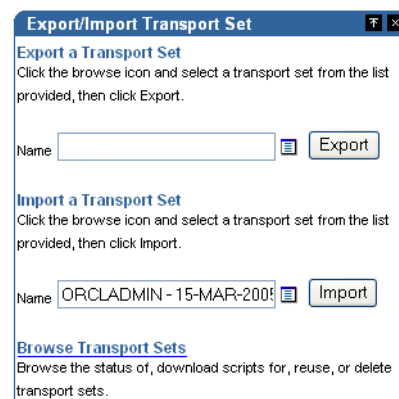
To import a transport set into Oracle Portal:

1. On the target installation, log in to Oracle Portal as a user with administrator privileges (for more information, see "How to log in to Oracle Portal").
2. Display the Administer tab.



3. In the **Import A Transport Set** area, click the Browse button next to the **Name** field and select the transport set to import.

The name of the selected transport set is displayed in the **Name** field.



4. Click **Import** to start the import process.

Oracle Portal displays the Import transport set page.



5. In the **Explicitly Selected Objects** table, ensure that the check box in the **Replace on Import** column is selected.
6. Click **Import Now** to start the import.
The **View Log** page is displayed.
7. Select the **View Log of Actions** link to monitor the status of the export.
Refresh the browser window until the import is complete. When the import is complete, the log entry 'Completed On: <date and time>' is displayed.
8. Click **Close** to return to the **View Log** page.
9. Click **Close** to return to the **Administer** tab.

You have now imported the Discoverer portlets into Oracle Portal. Oracle Portal users can now use their existing Discoverer portlets on the new Discoverer installation.

How to copy Discoverer connections from one Discoverer installation to another

You copy Discoverer connections from one Discoverer installation to another using the `ssomig` script. The following types of connections are copied:

- Public connections
- Private connections that were created when Single Sign-On was enabled for Discoverer. Private connections that were created when Single Sign-On was not enabled for Discoverer are not copied, because they are held as cookies in the browser cache where the connections were initially created.

To copy Discoverer connections from one Discoverer installation to another:

1. On the source installation, export the `<user-prefix>_DISCOVERER_PS` schema using the `ssomig` script (for more information, see "[How to export Discoverer connections](#)").
2. On the target installation, import the `<user-prefix>_DISCOVERER_PS` schema using the `ssomig` script (for more information, see "[How to import Discoverer connections](#)").

Note: For more information about the `ssomig` script, see *Oracle Fusion Middleware Administrator's Guide for Oracle Single Sign-On*.

How to obtain the <user-prefix>_DISCOVERER_PS login password

To run `ssomig` commands you need the <user-prefix>_DISCOVERER_PS login password. If you do not know the password, then use the `ldapsearch` command to obtain the password.

To obtain the <user-prefix>_DISCOVERER_PS login password, use the same procedure that is outlined in ["How to obtain the PORTAL login password"](#).

How to export Discoverer connections

You export Discoverer connections to enable you to copy them from one Discoverer installation to another. You export the connections from the DISCOVERER_PS schema, which stores Discoverer connections and related information.

To export Discoverer connections:

1. On the target installation, run the following command at the command prompt:

```
IDM_ORACLE_HOME/sso/bin/ssomig -s <user-prefix>_DISCOVERER_PS
-p <<user-prefix>_DISCOVERER_PS_password> -c <src_tns_alias> -export
```

Where:

- <<user-prefix>_DISCOVERER_PS_password> is the login password. For more information about obtaining the login password, see ["How to obtain the <user-prefix>_DISCOVERER_PS login password"](#).
- <src_tns_alias> is the net service name for the Single Sign-On database. You can find this in the `tnsnames.ora` file.

For example:

```
IDM_ORACLE_HOME/sso/bin/ssomig -s myprefix_DISCOVERER_PS
-p ov0ar19t -c portalsrc -export
```

2. If the source installation and target installation are on different machines, then copy the following files from the source machine to the target machine.

- The dump (*.dmp) file, the log file, and the script.
- The `tnsnames.ora` file, if any connections use a database alias.

You have now exported the Discoverer connections from the source installation. The next step is to import the Discoverer connections into the target installation (for more information, see ["How to import Discoverer connections"](#)).

How to import Discoverer connections

You import Discoverer connections to enable you to copy them from one Discoverer installation to another.

To import Discoverer connections:

1. On the target installation, run the following command at the command prompt:

```
IDM_ORACLE_HOME/sso/bin/ssomig -s <user-prefix>_DISCOVERER_PS
-p <<user-prefix>_DISCOVERER_PS_password> -c <dst_tns_alias> -import
-merge -discoforce
```

Where:

- <<user-prefix>_DISCOVERER_PS_password> is the login password. For more information about obtaining the login password, see ["How to obtain the <user-prefix>_DISCOVERER_PS login password"](#).

For example:

```
IDM_ORACLE_HOME/sso/bin/ssomig -s myprefix_DISCOVERER_PS  
-p f9qx233h -c portalsrc -import -merge -discoforce
```

2. Re-create any Oracle Single Sign-On user accounts that are deployed on the source installation to the target installation. Use the Administration tab - User area in Oracle Portal.

You have now imported the Discoverer connections into the target installation. You can now copy Discoverer portlets to the target installation (for more information, see "[How to copy Discoverer portlets from one Discoverer installation to another](#)").

Authoring Oracle Portal Pages with Discoverer Portlets

This chapter explains how to author Oracle Portal pages with Discoverer Portlets, and contains the following topics:

- "Pre-requisites for publishing Discoverer worksheets in Oracle Portal"
- "How to connect to Oracle Portal and display the Add Portlets page"
- "How to add a Discoverer List of Worksheets portlet to an Oracle Portal page"
- "How to add a Discoverer Worksheet portlet to an Oracle Portal page"
- "How to add a Discoverer Gauges portlet to an Oracle Portal page"
- "How to edit a Discoverer portlet"
- "How to customize a Discoverer portlet using Discoverer Portlet Provider"
- "How to customize the Discoverer worksheet shown in a portlet in Viewer, using the Analyze link"
- "Notes about resizing graphs in Discoverer Worksheet portlets"
- "Notes about using worksheet parameters in Discoverer portlets"
- "How to map worksheet parameters to Page Parameters in Oracle Portal"
- "How to add Simple Parameter Form portlets to an Oracle Portal page"
- "Notes about publishing Discoverer content in portlets"
- "About choosing database connections for Discoverer portlets"
- "About choosing refresh options for Discoverer portlets"
- "About Discoverer connections and Single Sign-On"

Pre-requisites for publishing Discoverer worksheets in Oracle Portal

Before you can publish Discoverer content in Oracle Portal you need:

- Discoverer Portlet Provider to be registered in Oracle Portal (for more information, see [Chapter 2, "Setting up Discoverer Portlet Provider in Oracle Portal"](#)).
- Oracle Portal log in details (that is, Single Sign-On user details)
- Privileges to create, edit, and customize pages in Oracle Portal

Note: For Discoverer WSRP Portlets, the **Edit Defaults** link is not available. To edit these kind of portlets, you can use the **Customize** option.

- Access to a public Discoverer connection created by the Discoverer manager or a private Discoverer connection created while you were logged in as a Single Sign-On user
- One or more worksheets created in Discoverer Plus Relational, Discoverer Plus OLAP, or Discoverer Desktop

Note: If you want to create a Discoverer Gauges portlet, you must use a crosstab worksheet.

Notes

- Contact the Oracle Portal administrator if you do not have the privileges to create, edit, or customize pages.
- Private Discoverer connections created in a non-Single Sign-On environment are not available in Discoverer Portlet Provider. To use a private connection to publish Discoverer data in a Discoverer portlet, Single Sign-On must be enabled in Oracle Fusion Middleware (for more information, contact the Oracle Fusion Middleware administrator).

To add a Discoverer portlet to an Oracle Portal page, you:

- use the Add Portlets page to add an undefined portlet with default settings to the Oracle Portal page
- use the Edit Defaults page to edit the default settings of the portlet to suit your needs, and make the portlet ready for use

Having created a Discoverer Portlet, you can subsequently modify it in two ways:

- by editing defaults
When you use the Edit Defaults option, the changes that you make are visible to all users of an Oracle Portal page (for more information, see ["How to edit a Discoverer portlet"](#)).
- by customizing
When you use the Customize option, the changes that you make are only visible to you (for more information, see ["How to customize a Discoverer portlet using Discoverer Portlet Provider"](#)).

Notes

- Refer to the Oracle Portal Online Help for more information about using the Oracle Portal toolbars and wizards.

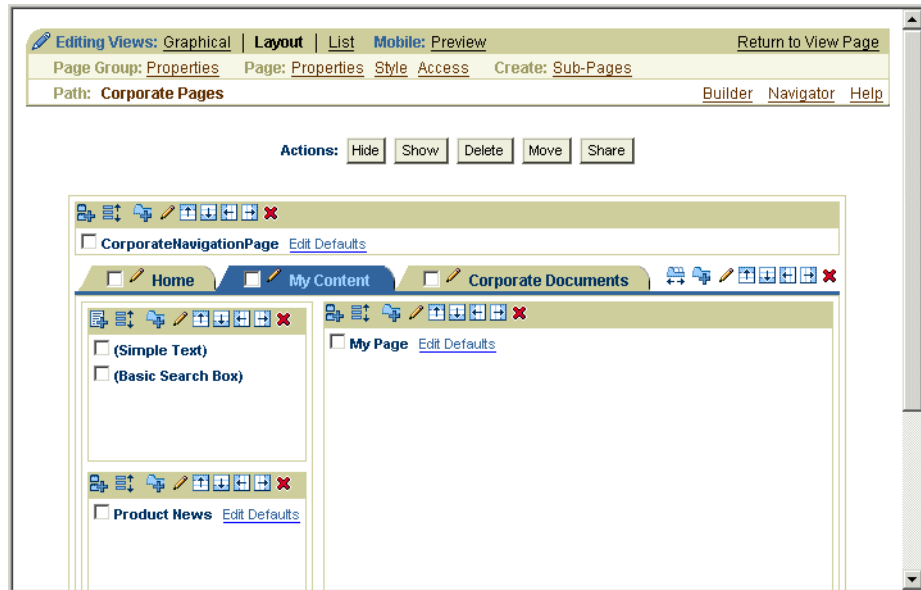
How to connect to Oracle Portal and display the Add Portlets page

You connect to Oracle Portal and display the Add Portlets page when you want to add a portlet (for example, a Discoverer Worksheet portlet) to an Oracle Portal page.

To connect to Oracle Portal and display the Add Portlets page:

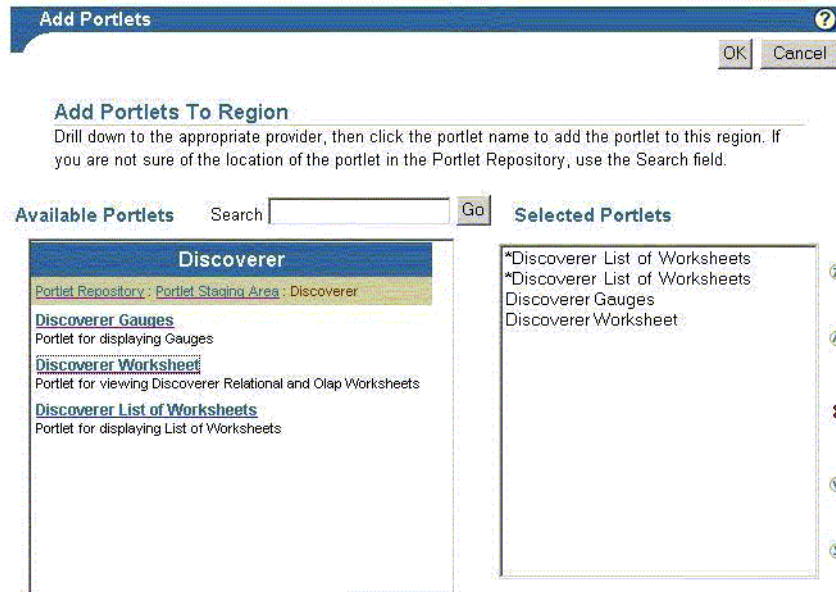
1. Start an Internet browser.

2. Display the Oracle Portal page to which you want to add a Discoverer portlet.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).
4. Click **Edit** to display the Edit Views page.
5. Select the **Editing Views: Layout** link at the top of the page.



6. Click the **Add Portlets** icon in a region to display the Add Portlets page.
To add portlets, you move portlets from the **Available Portlets** list to the **Selected Portlets** list.
7. In the **Available Portlets** area, select Discoverer Portlet Provider or navigate to where the Discoverer Portlet Provider is located and select it.

Hint: If you have recently installed Oracle Fusion Middleware or Oracle Business Intelligence, the Discoverer portlets might be in the Portlet Staging Area folder. If you cannot find the Discoverer Portlet Provider, contact the Discoverer manager or Oracle Portal administrator.



The three Discoverer portlet types (Discoverer Worksheet, Discoverer List of Worksheets, and Discoverer Gauges) are displayed in the Available Portlets area.

8. Click the Discoverer portlets you want to add to the Selected Portlets list.
9. (Optional) Use the up and down arrows to change the order of the portlets in the Selected Portlets list.
10. Click OK.

How to add a Discoverer List of Worksheets portlet to an Oracle Portal page

You add a List of Worksheets portlet to an Oracle Portal page when you want to provide Discoverer worksheet links in Oracle Portal. For example, you might want to publish a link for sales worksheets to colleagues in a sales department.

For more information, see "[About the Discoverer List of Worksheets portlet](#)".

To add a Discoverer List of Worksheets portlet:

1. Connect to Oracle Portal and display the Add Portlets page (for more information, see "[How to connect to Oracle Portal and display the Add Portlets page](#)").
2. Select the **Discoverer List of Worksheets** link to add the portlet to the **Selected Portlets** list.
3. Click OK to close the Add Portlets page.
4. Select the **Edit Defaults** link next to the portlet that you have just added to start the portlet wizard.

Note: For Discoverer WSRP Portlets, the **Edit Defaults** link is not available. To edit these portlets, use the **Customize** option. For more information, see "[How to customize a Discoverer portlet using Discoverer Portlet Provider](#)".



5. Use the Database Connections page to specify how Oracle Portal users can access the portlet (for more information, see "[About choosing database connections for Discoverer portlets](#)").
6. Use the List of Worksheets page to select the worksheets to display in the portlet.
7. Use the Refresh Options page to specify when the workbook list is refreshed.
8. Use the Portlet Options page to specify the portlet name, the order of worksheets, and the maximum number of worksheets to display.
For example, you might want to display a maximum of ten worksheets in alphabetical order.
9. Use the Review Portlet Defaults page to check that you have selected the correct portlet options.
10. Click **Finish** to save the defaults.

You can now view the Discoverer list of worksheets portlet. It might take a few minutes for the portlet to retrieve its content for the first time.

How to add a Discoverer Worksheet portlet to an Oracle Portal page

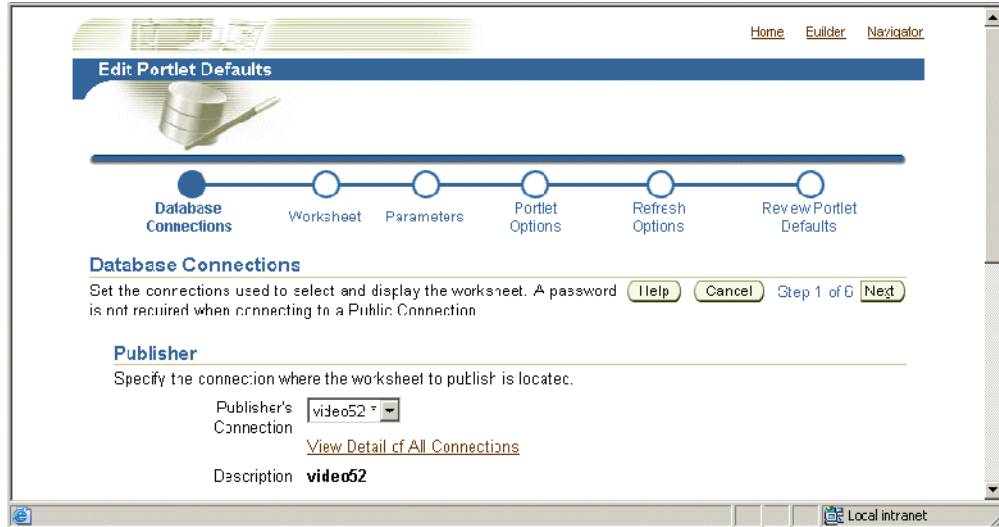
You add a Worksheet portlet when you want to add Discoverer worksheet data to a page in Oracle Portal. For example, you might want to publish a sales report to colleagues in a sales department.

For more information, see "[About the Discoverer Worksheet portlet](#)".

To add a Discoverer Worksheet portlet:

1. Connect to Oracle Portal and display the Add Portlets page (for more information, see "[How to connect to Oracle Portal and display the Add Portlets page](#)").
2. Select the **Discoverer Worksheet Portlet** link to add a portlet to the **Selected Portlets** list.
3. Click OK to close the Add Portlets page.
4. Select the **Edit Defaults** link next to the portlet that you have just added to start the portlet wizard.

Note: For Discoverer WSRP Portlets, the **Edit Defaults** link is not available. To edit these portlets, use the **Customize** option. For more information, see "[How to customize a Discoverer portlet using Discoverer Portlet Provider](#)".



5. Use the Database Connections page to specify how Oracle Portal users can access the portlet (for more information, see "[About choosing database connections for Discoverer portlets](#)").
6. Use the Worksheet page to select the worksheet to display in the portlet.
7. (optional) If parameters are defined for the worksheet, use the Edit Parameters page to specify parameter values.

Parameter values provide dynamic input to worksheets. For example, to focus on specific information, or to provide input to calculations (for more information about parameters, see the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Plus*).

Note: The Edit Parameters page is not displayed if you are publishing a worksheet containing OLAP data.

8. Use the Portlet Options page to specify the parts of the worksheet to publish. For example, you might want to publish the worksheet data only, the worksheets graph only, or both the worksheet data and the worksheet's graph.
9. Use the Refresh Options page to specify when the worksheet data is refreshed.
10. Use the Review Portlet Defaults page to check that you have selected the correct portlet options.
11. Click **Finish** to save the defaults.

You can now view the Discoverer worksheet in the portlet. It might take a few minutes for the portlet to retrieve its content for the first time.

How to add a Discoverer Gauges portlet to an Oracle Portal page

You add a Discoverer Gauges portlet when you want to display Discoverer worksheet data as gauges in a page in Oracle Portal. For example, you might want to create a management dashboard that monitors key performance indicators.

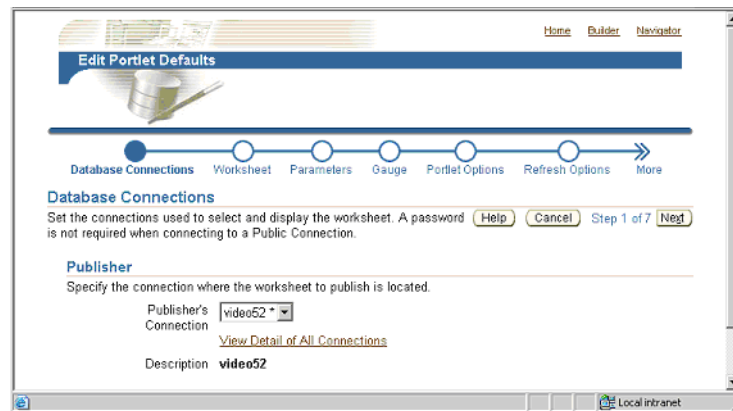
Note: To create a Discoverer Gauges portlet, you must use a crosstab worksheet.

For more information, see "[About the Discoverer Gauges portlet](#)".

To add a Discoverer Gauges portlet:

1. Connect to Oracle Portal and display the Add Portlets page (for more information, see "[How to connect to Oracle Portal and display the Add Portlets page](#)").
2. Select the **Discoverer Gauges Portlet** link to add a portlet to the **Selected Portlets** list.
3. Click OK to close the Add Portlets page.
4. Select the **Edit Defaults** link next to the portlet that you have just added to start the portlet wizard.

Note: For Discoverer WSRP Portlets, the **Edit Defaults** link is not available. To edit these portlets, use the **Customize** option. For more information, see "[How to customize a Discoverer portlet using Discoverer Portlet Provider](#)".



5. Use the Database Connections page to specify how Oracle Portal users can access the portlet (for more information, see "[About choosing database connections for Discoverer portlets](#)").
6. Use the Worksheet page to select the worksheet to display in the portlet.

Note: If you are creating a Discoverer Gauges portlet, the Worksheet page only displays crosstab worksheets. You cannot create a Discoverer Gauges portlet based on a table worksheet.
7. (optional) If parameters are defined for the worksheet, use the Edit Parameters page to specify parameter values.

Parameter values provide dynamic input to worksheets. For example, to focus on specific information, or to provide input to calculations (for more information about parameters, see the *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Plus*).

Note: The Edit Parameters page is not displayed if you are publishing a worksheet containing OLAP data.

8. Use the Gauge page to specify the rows and columns to publish, and specify threshold values for the gauges.
9. Use the Portlet Options page to specify the parts of the worksheet to publish.
For example, you might want to publish the worksheet data only, the worksheet's graph only, or worksheet data and a worksheet's graph.
10. Use the Refresh Options page to specify when the worksheet data is refreshed.
11. Use the Review Portlet Defaults page to check that you have selected the correct portlet options.
12. Click **Finish** to save the defaults.

You can now view the Discoverer Gauges portlet. It might take a few minutes for the portlet to retrieve its content for the first time.

How to edit a Discoverer portlet

You edit a Discoverer portlet when you want to change how a portlet is displayed to Oracle Portal users. For example, you might want to display a different worksheet in a Discoverer Gauges portlet.

To edit a Discoverer portlet:

1. Start an Internet browser.
2. Display the Oracle Portal page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).
4. Click **Edit** to display the page in edit mode.
5. Select the **Layout** link from the Editing Views area at the top of the page.
6. Select the **Edit** link to display the Edit page.

For example, for a Discoverer Worksheet portlet, the Edit Worksheet Portlet Defaults page is displayed.

7. Use the Update buttons on the Edit Portlet Defaults page to change the portlet settings as required.

For example, to update the portlet options, click Update in the Portlet Options area to display the Portlet Options page and make changes.

8. Click **Done** to save your changes.

You can now view the updated Discoverer portlet.

How to customize a Discoverer portlet using Discoverer Portlet Provider

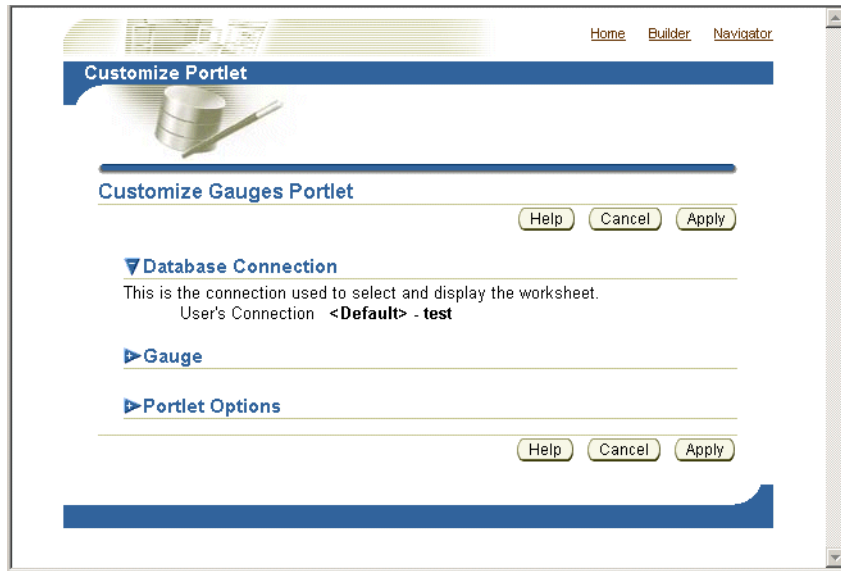
You customize a Discoverer portlet when you want to make changes that are only visible to you, not to other Oracle Portal users. For example, you might want to apply a spotlight format to a Discoverer Worksheet portlet.

For more information about the different customizations you can make in Discoverer Portlet Provider and Discoverer Viewer, see "[About using Oracle Portal as a personalization framework for Discoverer](#)".

To customize a Discoverer portlet using Discoverer Portlet Provider:

1. Start an Internet browser.
2. Display the Oracle Portal page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click **Login** and enter your Oracle Portal login details (that is, your Single Sign-On details).
4. Click **Customize** to display the appropriate Customize Portlet page for the Discoverer portlet you selected.

For example, for a Discoverer Gauges portlet, the Customize Gauges portlet page is displayed.



5. Use the Customize Portlet page to make the required changes to the portlet.
6. Click **Apply** to save customizations to the portlet.

You can now view the updated Discoverer portlet. Customization changes that you make are only visible to you, not to other Oracle Portal users.

How to customize the Discoverer worksheet shown in a portlet in Viewer, using the Analyze link

You typically customize the Discoverer worksheet shown in a portlet to change its layout or create a personalized view of it.

For more information about the different customizations you can do in Discoverer Portlet Provider and Discoverer Viewer, see "[About using Oracle Portal as a personalization framework for Discoverer](#)".

Note: You can choose not to allow users to analyze in Discoverer Viewer, or not to allow users to save their changes back from Discoverer Viewer, by using settings in the Portlet Options page (displayed using the Edit Defaults link).

To customize the Discoverer worksheet shown in a portlet in Viewer, using the Analyze link:

1. Start an Internet browser.
2. Display the Oracle Portal page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).
4. Select the Analyze link to display the worksheet in Discoverer Viewer.
5. Make changes to the worksheet in Discoverer Viewer.
6. Select the **Save and return to Portal** link.

Hint: The **Save and return to Portal** link is only displayed if you have the necessary privileges to save changes. If you do not have the necessary privileges, only the **Cancel and return to Portal** link is displayed. If you require privileges, contact the portlet publisher.

You can now view the updated Discoverer worksheet in the portlet.

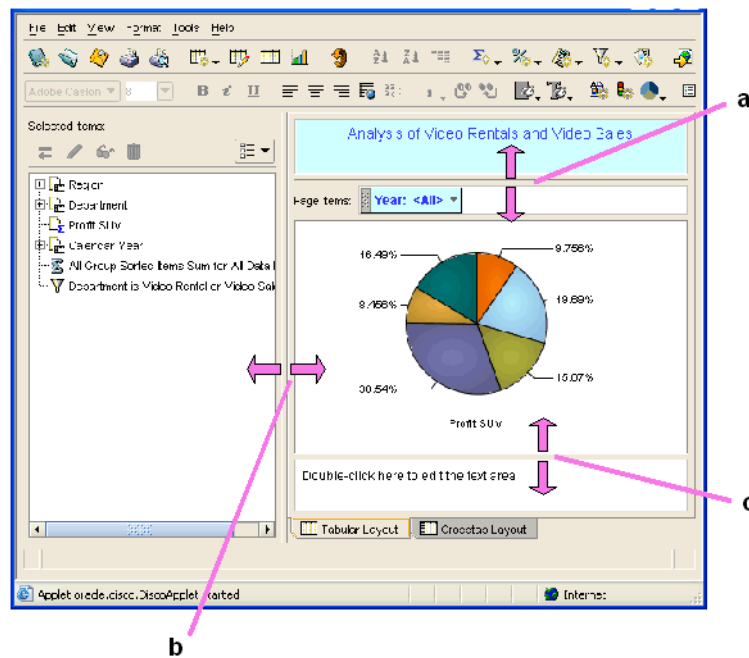
Notes about resizing graphs in Discoverer Worksheet portlets

When you publish a worksheet containing a graph in a Discoverer Worksheet portlet, you might find that the graph is too large and uses too much of the Oracle Portal display area. If a graph is too large, you can resize it in any of the following ways:

- In Oracle BI Discoverer Plus, edit the source worksheet and resize the graph, then save the worksheet.

The graph size that you specify in Oracle BI Discoverer Plus is also applied for all users in Oracle BI Discoverer Viewer and Oracle Portal.

To resize a graph in Oracle BI Discoverer Plus, drag the dividers surrounding the graph pane to change the size of the graph pane. Discoverer automatically resizes the graph to fit the graph pane. For example, in the example below you might drag the left-hand divider to the right to make the graph smaller.

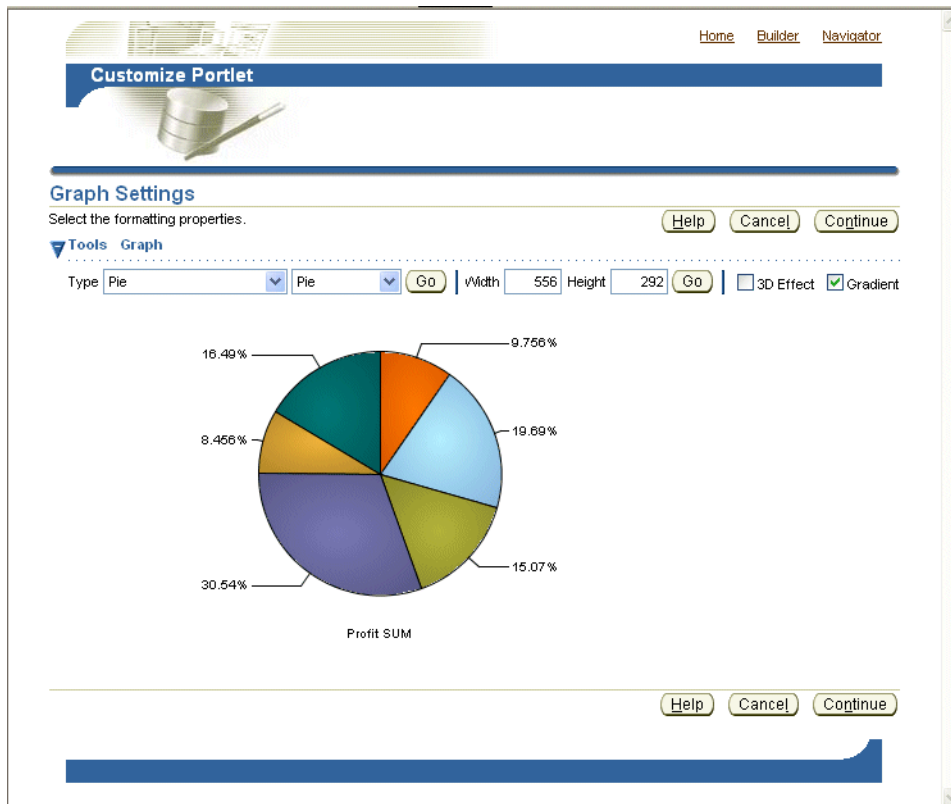


Key to figure

- a. The top divider used to increase or decrease the height of the graph pane from the top.
- b. The left-hand divider used to increase or decrease the width of the graph pane.
- c. The bottom divider used to increase or decrease the height of the graph pane from the bottom.
- In Oracle Portal, customize the portlet and resize the graph, then save the changes.

The graph size that you specify in Oracle Portal is applied in Oracle Portal, but not for other Oracle Portal users. The source worksheet is not changed.

To resize a graph in Oracle Portal, select the **Customize** link in a portlet, display the Graph Settings page and use the **Height** and **Width** fields to resize the graph.

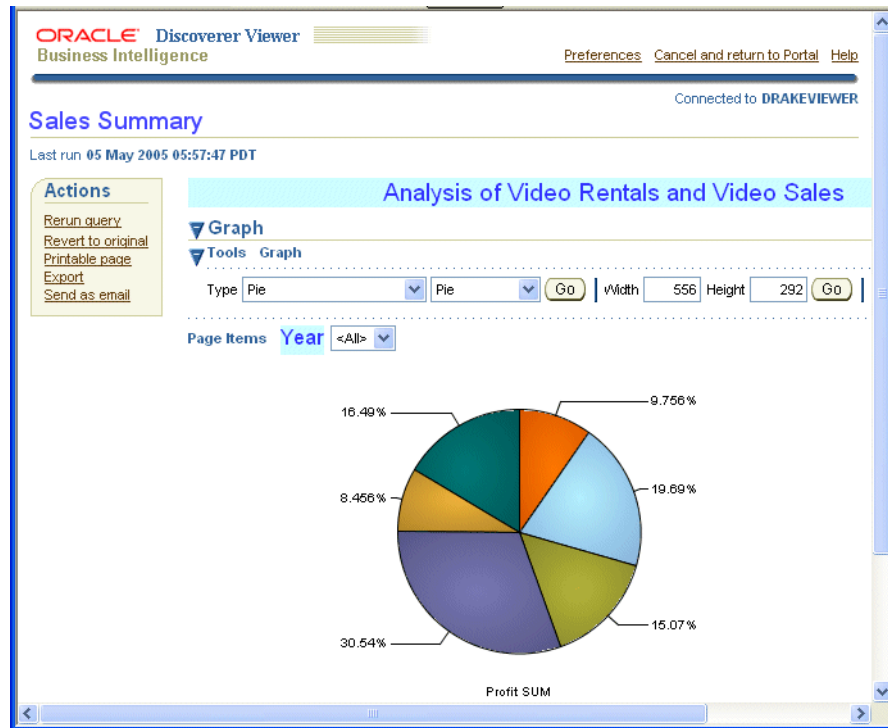


For more information about customizing worksheet portlets, see "[How to customize a Discoverer portlet using Discoverer Portlet Provider](#)".

- In Oracle BI Discoverer Viewer invoked from within Oracle Portal (that is, you select the **Analyze** link below a Discoverer portlet), customize the worksheet and resize the graph, then save the changes.

The graph size that you specify in Oracle BI Discoverer Viewer is applied in Oracle BI Discoverer Viewer for end users using the current connection, but not for other connections. The source worksheet is not changed.

To resize a graph in Oracle BI Discoverer Viewer, you select the **Analyze** link below a Discoverer portlet, select the **Graph** link, and use the **Height** and **Width** fields to resize the graph.



For more information about customizing a worksheet in Oracle BI Discoverer Viewer, see ["How to customize the Discoverer worksheet shown in a portlet in Viewer, using the Analyze link"](#).

Notes

- Customizations made in Oracle Portal override worksheet settings saved in Oracle BI Discoverer Plus.
- If you resize a graph in Oracle BI Discoverer Plus, to display the resized graph in Oracle Portal you must refresh the Discoverer portlets that display that worksheet.

Notes about using worksheet parameters in Discoverer portlets

If you create Discoverer portlets that contain worksheet parameters, you can map the worksheet parameters to Oracle Portal Page Parameters and create a Simple Parameter Form portlet. This capability enables a portlet user to easily specify a parameter value for a page level parameter to update many different Discoverer portlets at the same time. To accomplish this you:

- map the Discoverer worksheet parameter to a Generic (for example, Discoverer portlet) Page Parameter (for more information, see ["How to map worksheet parameters to Generic Page Parameters"](#))
- create an Oracle Portal Page Parameter (for more information, see ["How to create a Page Parameter"](#))
- map the Oracle Portal Page Parameter to the Generic Page Parameter (for more information, see ["How to map a Generic Page Parameter to a Page Parameter"](#))
- add a Simple Parameter Form portlet to the Oracle Portal page containing the Discoverer portlets (for more information, see ["How to add Simple Parameter Form portlets to an Oracle Portal page"](#))

For example, you could create three Discoverer portlets, each one containing a worksheet with a parameter called City_WS_param. While editing the defaults of each portlet, you map City_WS_param to a generic Discoverer portlet parameter, say DiscoParameter1. Make a note of each generic Discoverer portlet parameter and which worksheet parameters they map to so that you can correctly set up the Oracle Portal page parameters.

When you get all three portlets on an Oracle Portal page, click the Edit button and select the Page: Properties link. Display the Parameters tab of the Edit Page screen. If there is no suitable page parameter available, add a new page parameter called City_Page_Param. In the Page Parameter Properties section, you might want to make the parameter Customizable and may optionally set the Display Name, Default Value and Description. In the Portlet Parameter Values section, for each appropriate portlet, map DiscoParameter1 to use Page Parameter City_Page_Param.

Note: You can map parameters in both Worksheet portlets and Gauges portlets. In other words, you can update both Gauges portlets and Worksheet portlets at the same time with a single parameter value.

You can also enable users to easily set page level parameter values by adding one or more Simple Parameter Form portlets to the portal page. Portlet users can then specify a parameter value in a Simple Parameter Form portlet to update many Discoverer portlets at the same time (for more information, see ["How to add Simple Parameter Form portlets to an Oracle Portal page"](#)).

For more information about mapping worksheet parameters to portal page level parameters, see ["How to map worksheet parameters to Page Parameters in Oracle Portal"](#).

Notes

- If the worksheet parameter must be entered as an index value rather than an actual value (for example, the end user must enter the value 3 instead of the value March), the end user must specify the index value in single quotation marks (for example, '3').
- You can map Page Parameters in Oracle Portal only to worksheets that contain relational data. Worksheets that are created in Discoverer Plus OLAP do not support parameters.

How to map worksheet parameters to Page Parameters in Oracle Portal

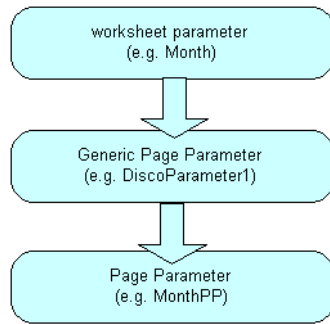
You map worksheet parameters to Page Parameters in Oracle Portal to enable portlet users to specify a Page Parameter value that updates many Discoverer portlets at the same time. For example, when a portlet user chooses January as a Page Parameter value, you might want three Discoverer worksheets to be refreshed with data for January.

To map a worksheet parameter to a Page Parameter you:

- Map a worksheet parameter to a Generic Page Parameter.
- Map the Generic Page Parameter to a portal Page Parameter.

Discoverer provides ten default Generic Page Parameters called DiscoParameter1, DiscoParameter2, DiscoParameter3, and so on through to DiscoParameter10.

The figure below shows the process of mapping worksheet parameters to Page Parameters.

Figure 3–1 Mapping a worksheet parameter to a Page Parameter in Oracle Portal

To map Discoverer worksheet parameters to portal Page Parameters:

1. For each Discoverer portlet, map a worksheet parameter to a Generic Page Parameter (for more information, see ["How to map worksheet parameters to Generic Page Parameters"](#)).

For example, you might map a worksheet parameter called Month to a Generic Page Parameter called DiscoParameter1.

2. (optional) If you have not created a Page Parameter in the Oracle Portal page you want to edit, create a Page Parameter (for more information, see ["How to create a Page Parameter"](#)).

For example, you might create a Page Parameter in Oracle Portal called MonthPP.

3. Map a Generic Page Parameter to a Page Parameter for each Discoverer portlet on an Oracle Portal page (for more information, see ["How to map a Generic Page Parameter to a Page Parameter"](#)).

For example, you might map DiscoParameter1 to MonthPP.

How to map worksheet parameters to Generic Page Parameters

You map a worksheet parameter to Generic Page Parameters to enable you to later map the Generic Page Parameter to a Page Parameter in Oracle Portal.

To map a worksheet parameter to a Generic Page Parameter:

1. Start an Internet browser.
2. Display the page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click Login and enter your portal login details (that is, your Single Sign-On details).
4. Create a new Discoverer Worksheet portlet or Gauges portlet (or edit an existing portlet) and navigate to the Parameters page, as follows:

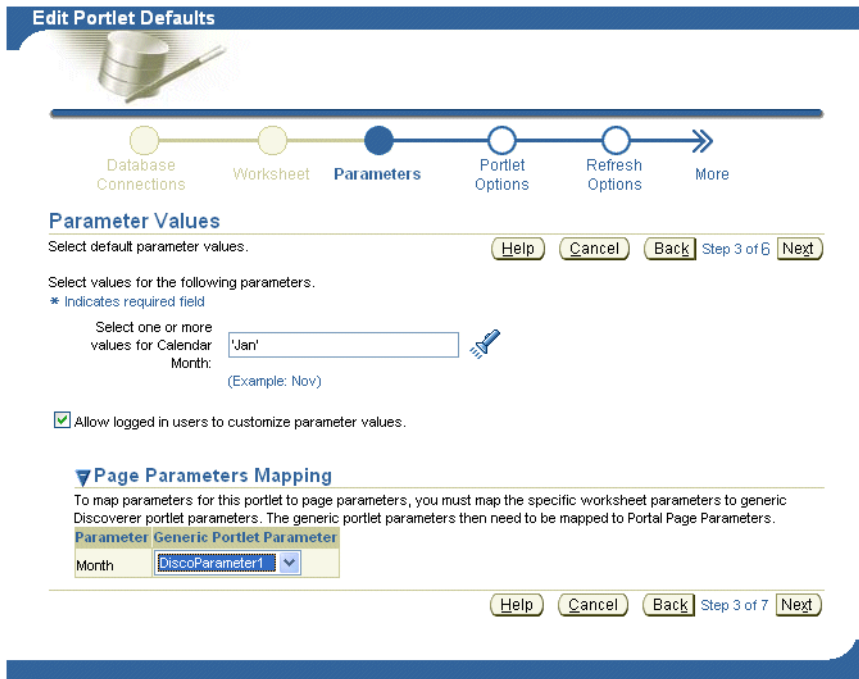
- If you are creating a new portlet, add a new Discoverer Worksheet portlet or Gauges portlet and navigate to the Parameters page.

For more information, see ["How to add a Discoverer Worksheet portlet to an Oracle Portal page"](#) or ["How to add a Discoverer Gauges portlet to an Oracle Portal page"](#).

- If you are editing an existing portlet, select the Edit Defaults link next to the portlet to edit, and navigate to the Parameters page.

For more information, see ["How to edit a Discoverer portlet"](#).

Oracle Portal displays the Parameters page.



5. Use the **Generic Page Parameter** drop down list next to a worksheet parameter in the **Parameter** column to map that worksheet parameter to a Generic Page Parameter provided by Discoverer (for example, DiscoParameter1).

For example, to map a worksheet parameter called Month to DiscoParameter1, select DiscoParameter1 from the **Generic Page Parameter** drop down list.

6. Save changes to the portlet.

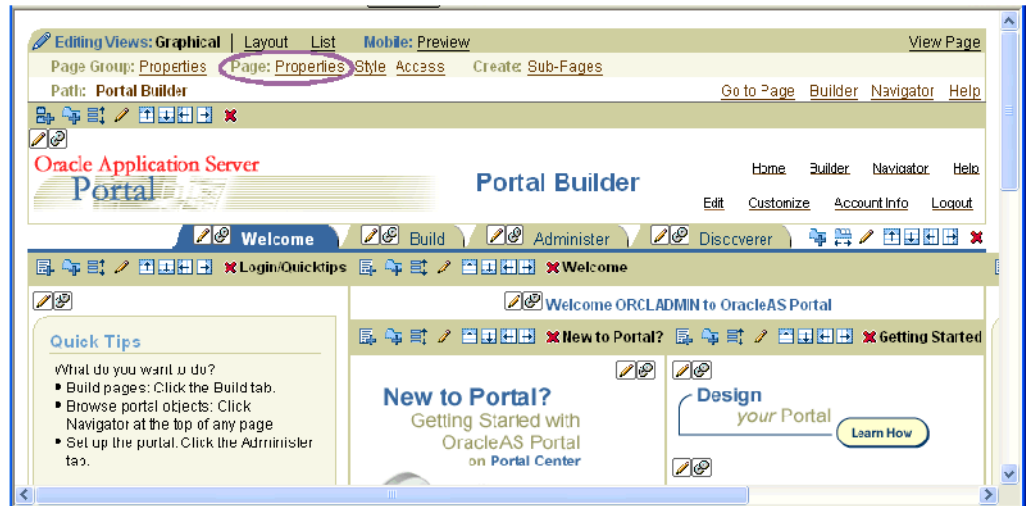
Having mapped a worksheet parameter to a Generic Page Parameter, you must map the Generic Page Parameter to a Page Parameter in Oracle Portal (for more information, see [How to map a Generic Page Parameter to a Page Parameter](#)).

How to create a Page Parameter

You create a Page Parameter to enable portlet users to specify a Page Parameter value that updates many Discoverer portlets at the same time.

To create a Page Parameter:

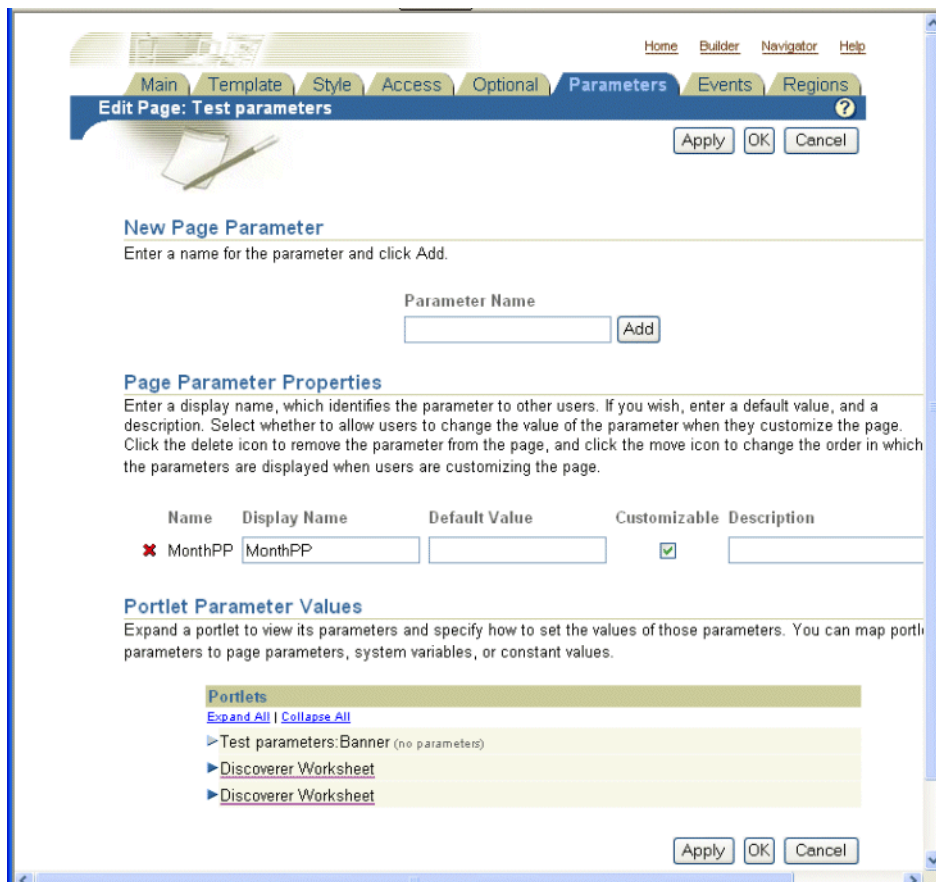
1. Start an Internet browser.
2. Display the Oracle Portal page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).



4. Select the **Properties** link in the **Page** area to display the Edit Page dialog.
5. Display the Parameters tab.
6. Enter a name for the Page Parameter in the **New Parameter** field and click Add.

Hint: The name should be a short unique string with no spaces or separating characters (for example, MonthPP).

The page parameter that you created is added to the list in the **Page Parameter Properties** area.



7. Click OK to save the page properties.

You can now map Generic Page Parameters to the new Page parameter (for more information, see ["How to map a Generic Page Parameter to a Page Parameter"](#)).

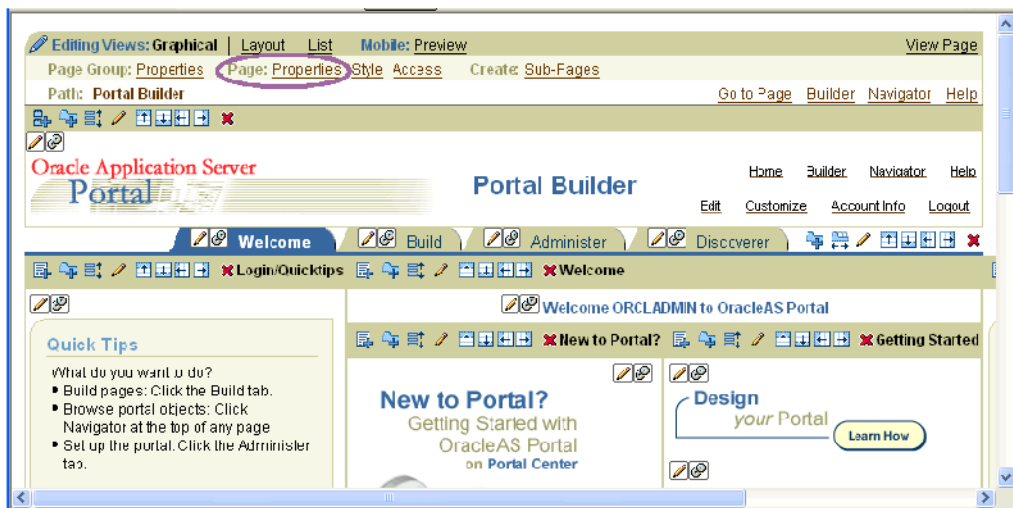
How to map a Generic Page Parameter to a Page Parameter

You map a Generic Page Parameter to a Page Parameter to enable portlet users to specify a Page Parameter value that updates many Discoverer portlets at the same time.

Hint: Before you can map a Page Parameter to a Generic Page Parameter, you must first map a worksheet parameter to a Generic Page Parameter (for more information, see ["How to map worksheet parameters to Page Parameters in Oracle Portal"](#)) and create a Page Parameter if one is not available (for more information, see ["How to create a Page Parameter"](#)).

To map a Generic Page Parameter to a Page Parameter:

1. Start an Internet browser.
2. Display the Oracle Portal page containing the Discoverer portlet that you want to edit.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).



4. Select the **Properties** link in the **Page** area to display the Edit Page dialog.
5. Display the Parameters tab.
6. In the Portlets table in the Portlet Parameter Values area, click on a portlet name (for example, Discoverer Worksheet) to display the list of Generic Page Parameters (for example, DiscoParameter1, DiscoParameter2).

Portlet Parameter Values

Expand a portlet to view its parameters and specify how to set the values of those parameters. You can map portlet parameters to page parameters, system variables, or constant values.

The screenshot shows the 'Portlet Parameter Values' interface. Under the 'Discoverer Worksheet' section, there are three 'Portlet Parameter' entries: 'DiscoParameter1', 'DiscoParameter2', and 'DiscoParameter3'. Each entry has a dropdown menu set to 'Null'.

7. Select Page Parameter from the drop down list next to the Generic Page Parameter to which you want to map the Page Parameter.

Portlet Parameter Values

Expand a portlet to view its parameters and specify how to set the values of those parameters. You can map portlet parameters to page parameters, system variables, or constant values.

The screenshot shows the 'Portlet Parameter Values' interface. Under the 'Discoverer Worksheet' section, 'DiscoParameter1' is now mapped to 'Page Parameter' in its dropdown menu. 'DiscoParameter2' and 'DiscoParameter3' remain set to 'Null'.

8. Select the Page Parameter (for example, MonthPP) from the second drop down list that is displayed when you select Page Parameter in the previous step.

Portlet Parameter Values

Expand a portlet to view its parameters and specify how to set the values of those parameters. You can map portlet parameters to page parameters, system variables, or constant values.

The screenshot shows the 'Portlet Parameter Values' interface. Under the 'Discoverer Worksheet' section, 'DiscoParameter1' is mapped to 'Page Parameter' in its first dropdown menu, and 'MonthPP' is selected in the second dropdown menu. 'DiscoParameter2' and 'DiscoParameter3' remain set to 'Null'.

9. Click OK to save the page properties.

Oracle Portal refreshes the portal page.

You can now create a Simple Parameter Form portlet to enable portlet users to specify a Page Parameter value that updates many different Discoverer portlets at the same time (for more information, see ["How to add Simple Parameter Form portlets to an Oracle Portal page"](#)).

Note: An alternative (but more time consuming) method for portlet users to specify a Page Parameter value that updates many Discoverer portlets is as follows:

- a. Select the Customize link to display the Customize Page page.
- b. Display the Parameters tab.
- c. In the Page Parameter Values area, use the **Value** field next to a Page Parameters to specify a parameter value.

For example, you might enter January if you want Discoverer worksheet portlets to be refreshed with data for January.

- d. Click OK to save the changes.

The Page Parameter value that you specified is applied to Discoverer portlets in that page.

How to add Simple Parameter Form portlets to an Oracle Portal page

You add a Simple Parameter Form portlet to an Oracle Portal page to enable users to easily apply a parameter value to update the data displayed in one or more Discoverer portlets.

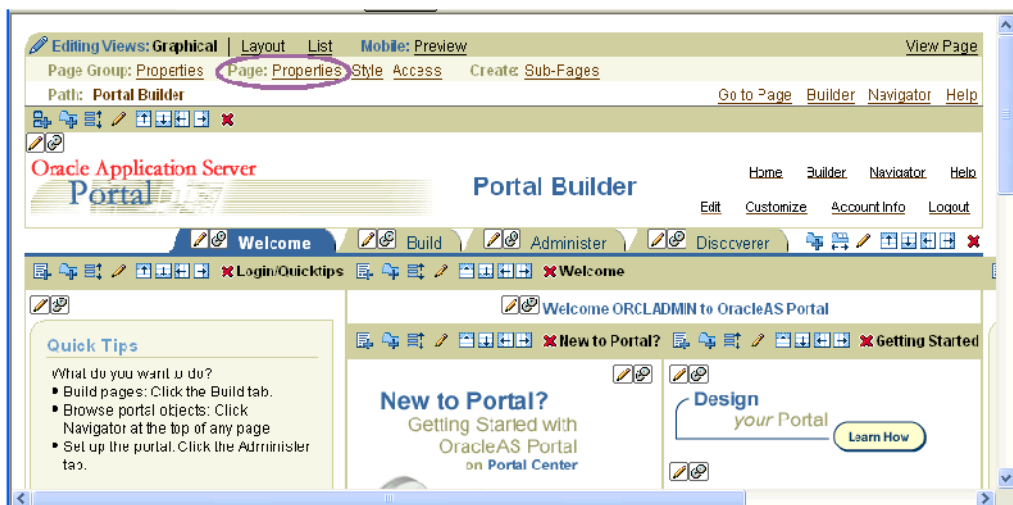
Before you can create a Simple Parameter Form portlet you must first:

- map a worksheet parameter to a Generic Page Parameter (for more information, see ["How to map worksheet parameters to Page Parameters in Oracle Portal"](#))
- create a Page Parameter if one is not available (for more information, ["How to create a Page Parameter"](#))
- map a Generic Page Parameter to a Page Parameter (for more information, see ["How to map a Generic Page Parameter to a Page Parameter"](#))

When you add a Simple Parameter Form portlet, do not base the form on the row or column from the worksheet for the gauge portlet. Instead, base the form only on the page items or measures from the worksheet for the gauge portlet.

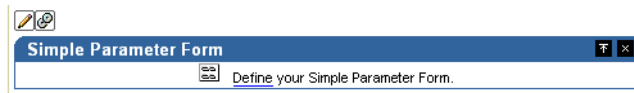
To add a Simple Parameter Form portlet to an Oracle Portal page:

1. Start an Internet browser.
2. Display the Oracle Portal page that contains the Discoverer portlets, where you want to add a Simple Parameter Form portlet.
3. If you are not logged in, click Login and enter your Oracle Portal login details (that is, your Single Sign-On details).



4. Select the Add Portlet link to display the Add Portlets page.
5. Select the Portlet Builders link and the Simple Parameter Form link to add a Simple Parameter Form to the list of Selected Portlets.
6. Click OK.

Oracle Portal displays an undefined Simple Parameter Form portlet.



7. Select the Define link in the undefined Simple Parameter Form.

Oracle Portal displays the Define your Simple Parameter Form pages where you enter the details that are required to create a Simple Parameter Form portlet.

For example, you might enter the following information in the Entry Fields area for a Month page parameter.

Entry Fields
Select which parameters to display in the form.

Name	Label	Parameter	Alignment	Display As	Width	List of Values
Field1	Month	Param1	Left	List of Values	20	Jan, Feb, Mar, Apr, May,
Field2	Department	Param2	Left	Hidden	20	

8. Click Finish when you have entered all the appropriate details.
9. Oracle Portal displays a new Simple Parameter Form.



10. Select the **Properties** link in the **Page** area to display the Edit Page dialog.
11. Create a Page Parameter (for example, MonthPP) if one is not available (for more information, see "How to create a Page Parameter").
12. Map a Generic Page Parameter to a Page Parameter.

You complete this step once for the Simple Parameter Form portlet and once for each Discoverer portlet that you want the Simple Parameter Form to update (for more information, see "How to map a Generic Page Parameter to a Page Parameter").

13. Display the Events tab.
14. Select the Submit link under the Simple Parameter Form link.

Oracle Portal displays an additional area. This area enables you to specify what happens.

15. Click the Browse icon and select the page to which the parameter value is sent when this event is raised (that is, when a user clicks the Submit button in the Simple Parameter Form).

For example, to specify that a Simple Parameter Form portlet submit its parameter value to the Discoverer BI Demo page, you would select the **Go to page** option (see screenshot below).

When this event is raised:

- Go to page: Discoverer BI Demo Pa
- Redisplay page: Discoverer BI Demo Page

Oracle Portal displays a Page Input area.

16. Enter appropriate information into the fields that appear in the Page Input area.

For example, to specify that the input from raising the event (that is, when a user clicks the Submit button in the Simple Parameter Form) is Parameter 1 you would select the following values:

Pass data to input parameters of page **New Discoverer BI Demo Page**:

Page Input

MonthPP =

17. Click OK to apply your changes.

You have now added a Simple Parameter Form portlet to an Oracle Portal page, enabling users to easily apply a parameter value to update the data displayed in one or more Discoverer portlets.

Hint: You can create more Simple Parameter Forms to update other parameter values in Discoverer portlets.

For more information, see:

- *Oracle Fusion Middleware Administrator's Guide for Oracle Portal*
- *Oracle Portal Help system*

Notes about publishing Discoverer content in portlets

When creating a Discoverer portlet, you have a large degree of control over what data is displayed. You also have control over when and how frequently the portlet is refreshed. When creating a portlet, you should carefully consider these settings to ensure that they meet your requirements and ensure a good balance between timeliness of data and performance of your system.

The following sections contain information about publishing Discoverer portlets:

- ["About choosing database connections for Discoverer portlets"](#)
- ["About choosing refresh options for Discoverer portlets"](#)
- ["About Discoverer connections and Single Sign-On"](#)

About choosing database connections for Discoverer portlets

When you create a Discoverer portlet (or edit an existing Discoverer portlet), the first step is to select the database connections that determine the following:

- The Discoverer content and options displayed in the portlet
- The data that is displayed to the portlet user

You select database connections using the Database Connections page (see example screenshots below).

Figure 3–2 Database Connections page for the Discoverer List of Worksheets portlet

Figure 3–3 Database Connections page for the Discoverer Worksheet and Discoverer Gauges portlets

The **Publisher's Connection** list displays the names of all Discoverer connections that are available to you as an Oracle Portal user. Public connections are indicated by a trailing asterisk '*'. Private connections that you created while connected to Discoverer as a Single Sign-On user are also displayed.

The Discoverer connection you select in the **Publisher's Connection** field determines the worksheets or lists of worksheets that are available to you in later steps of the

wizard. It also determines the connections that are available to set for data display for other users (Users Logged In to Portal and Users Not Logged In). The list of connections available on the rest of this page is limited to those that have the same database and EUL of the connection you choose for the Publisher's Connection. This behavior ensures that users can see the content you choose if you select a connection other than the Publisher's Connection for other users.

You specify how data is displayed to users when they are logged in to Oracle Portal in the **Users Logged In** area of this page. You have three choices on how to display the data to these logged-in users.

- You can display the same data to all users using the connection selected in the **Publisher's Connection** field, or select another Discoverer connection from the list.

Note: For List of Worksheets portlets this runs only one query for all users, and shows the same data returned by running the single query.

- If the worksheet you are including in the portlet is based on tables in your database that are striped by Single Sign-On user, you can select the **Display different data using the Publisher's Connection** option. Choosing this option enables the portlet to use the Publisher's Connection to get access to the worksheet and passes the Oracle Portal/Single Sign-On username to the database to return only data that the logged in, Oracle Portal/Single Sign-On user has access to.

Note: For List of Worksheets portlets this runs one query per Single Sign-On user.

- If the worksheet you are displaying in the portlet is based on tables in your database that are striped by database user, you can select the **Allow Users to Customize Database Connection** option. Choosing this option enables the user to determine which connection they want to use to get access to the worksheet and the data. In this case the user sees only the worksheet/list of worksheets/gauge if they have access to the published worksheet. You can also optionally select a connection to determine the data that is displayed by default before the user customizes a portlet.

Note: For List of Worksheets portlets this runs one query for every Single Sign-On user that customizes this portlet.

You specify how data is displayed to users who do not log in to Oracle Portal but still have access to the page that contains your portlet. These users are sometimes referred to as Public users. You have two choices for these users, as follows:

- You can choose to not display data.
- You can choose to display data using the Publisher's Connection or an available connection in the list.

Note: If you choose connections other than the Publisher's Connection to display data or allow users to choose their own connection, only those connections that have access to the worksheet defined in the portlet can see it.

For example, you create a worksheet portlet using worksheet MyWorkbook.sheet1 and choose the Publisher's Connection to be user SCOTT and you allow users to customize their database connection. The user SCOTT has shared the MyWorkbook workbook to user MARY but not to user FRED. When user MARY customizes the portlet to use her connection, she sees the contents of MyWorkbook.sheet1. If user FRED customizes the portlet to use his connection he gets an error stating that he does not have access to the worksheet. For more information about sharing, see *Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Discoverer Plus*.

For a Discoverer List of Worksheets portlet, you have two choices on how to display the data to users that are logged in (that is, in the Users Logged In area on the Database Connections page), as follows:

- You can choose to display the same list of worksheets to all logged in users using a Discoverer connection that you select. If you select this option, all users see the same list and cannot customize this list.
- You can choose to display a different list of worksheets to each logged in user by allowing them to customize their own Discoverer connection. In choosing this option, users might or might not see the list of worksheets that you select, depending on the Discoverer connection that they select.

Note: If you want users to be able to customize a Discoverer List of Worksheets portlet to include their own list of worksheets, be sure to select the **Allow users to change selected worksheets** option in the List of Worksheets page.

In the **Users Not Logged In** area of the Database Connections page, you specify how data is displayed to users who have not logged into Oracle Portal, but who still have access to a page that contains your portlet (that is, public users). You can choose to either display no data, or display data or worksheets using a Discoverer connection that you specify.

About choosing refresh options for Discoverer portlets

When you create a Discoverer portlet, you specify how often to refresh the data in the portlet.

While deciding the refresh frequency, consider the following factors:

- Each time a portlet is refreshed, it requires at least one Discoverer session on the middle-tier machine. If different users are using different connections for viewing the same portlet, a different Discoverer session is required for each user.

Note: The refresh cycle for each portlet instance is performed not just for currently logged-in users, but for all users who logged in to view that portlet instance at any time earlier. So, in a scenario involving 100 portlets accessible by 50 Single Sign-On users, potentially, the system would need to execute 5000 refresh requests in each refresh cycle.

If, for any reason, a particular user no longer requires access to a portlet, you must remove the corresponding cache entry manually from the `ptm5_cache` table.

- The number of portlet instances that Oracle Portal refreshes is restricted. The maximum number is determined by the Discoverer manager or Oracle administrator (for more information about the number of sessions in the Discoverer Portlet Provider's pool, see the *Oracle Fusion Middleware Configuration Guide for Oracle Business Intelligence Discoverer*). If the number of refresh jobs exceeds the number of sessions at any given time, the refresh jobs are queued until a session becomes available.
- The last refresh time and next refresh time are displayed in each portlet so that users would know how recent the displayed data is.
- If you allow users to analyze the data by selecting an Analyze link, a new query is run and they see the current data in Discoverer Viewer.

It is recommended that you select the lowest frequency possible that would still provide your users with data that meets their timeliness requirements.

You can choose to not refresh the portlet, which is the default setting. In this case, the portlet requires a Discoverer session when it is published, when a new user accesses it for the first time, or when a user changes the set of parameter values (only applies to Worksheet or Gauges portlets based on worksheets with parameters). You cannot set the refresh schedule of a Discoverer List of Worksheets portlet that contains a static list of worksheets.

As the publisher of a portlet, you can go to the Edit Defaults page of a portlet at any time and select the Refresh Portlet Now option to manually refresh the portlet.

About Discoverer connections and Single Sign-On

Discoverer connections work as follows with Single Sign-On:

- If Single Sign-On is enabled, then private connections (created in Discoverer Viewer) are available for publishing in Oracle Portal
- If Single Sign-On is not enabled, then only public connections (created in Oracle Fusion Middleware Control) are available for publishing in Oracle Portal

Using Discoverer Portlets in Oracle Portal

This chapter is about using Discoverer Portlets in Oracle Portal and contains the following topic:

- ["About using Oracle Portal as a personalization framework for Discoverer"](#)

About using Oracle Portal as a personalization framework for Discoverer

All authenticated/logged in users can customize particular properties of each Discoverer portlet you create. For example, they can change the portlet title and other portlet options and set formatting customizations for a Discoverer Worksheet portlet. You may also allow them to customize additional properties of the portlet such as the database connection used, parameter values, or the list of worksheets.

You can also allow users to analyze the worksheet that is used as the basis for a Discoverer Worksheet or Gauges portlet in the Single Worksheet Viewer. The Single Worksheet Viewer is a special instance of the Discoverer Viewer that is available only through a Discoverer portlet. When a user opens a worksheet from a Discoverer List of Worksheets portlet they also use the Single Worksheet Viewer. The Single Worksheet Viewer does not allow users to change the worksheet they have opened and does not allow them to change the connection used. It is specifically designed to restrict the user to access to one worksheet from a Discoverer portlet.

Note that when an authenticated user launches the Single Worksheet Viewer (whether from an Analyze link in a Worksheet or Gauges portlet or opening a worksheet from a Discoverer List of Worksheets portlet) the OracleAS Single Sign-On username is passed through to the query being executed to return data to Single Worksheet Viewer. In this way, if data differs by Single Sign-On user, the user can see only the data that they are supposed to see.

In the Single Worksheet Viewer, the user has access to additional customizations and actions that are not available within the portlet customizations page. For example, in the Single Worksheet Viewer the user can change layout by moving or swapping columns and change page item values to change the data displayed. In addition to extended customizations, Single Worksheet Viewer gives the user access to the following actions that are not available directly in the portlet:

- Rerun query
- Revert to original
- Print
- Export
- Send as email

The following table summarizes customizations and specifies whether they are available through the portlet customization page or through the Single Worksheet Viewer.

Table 4–1 Summary of where customizations are available

Customization	Customize Portlet	Analyze Worksheet
Database Connection	Yes	No
Parameter Values	Yes	Yes
Change Page Item Values	No	Yes
Layout	No	Yes
Stoplight Formats	Yes	Yes
Cell Formats	Yes	Yes
Sort (Relational and tabular worksheets only)	No	Yes
Saved Selections (OLAP worksheets only)	No	Yes
Link/Unlink Graph (OLAP worksheets only)	No	Yes
Graph Type	Yes	Yes
Portlet Options - Display Options	Yes	No
Portlet Options - Analyze Options	Yes	No
Portlet Options - Rows and Columns	Yes	No
Rows and Columns	No	Yes

Note: Rows and Columns are a separate setting in the portlet and in Single Worksheet Viewer, which do not affect each other.

You can further allow Discoverer users to save these customizations made in Single Worksheet Viewer for the Worksheet and List of Worksheets Discoverer portlets. By doing this you can create a personalization framework and effectively support hundreds of users with a handful of worksheets. You can allow each Oracle Portal/OracleAS Single Sign-On user to have their own personalized, custom view of the worksheets they are interested in without the overhead of creating and managing a database account for them or granting them privileges to create and save Discoverer workbooks to the database.

In all cases, whether modified in the customize portlet page or in the Single Worksheet Viewer, all customizations are stored on a per user, per portlet basis and are only viewable to that Oracle Portal user. The customizations do not impact (or are not visible to) other users.

Publishing Discoverer Worksheets in Oracle WebCenter

Oracle WebCenter provides technology for social networking, communication, collaboration, and personal productivity. Through a set of integrated services and applications, Oracle WebCenter integrates everything you require to exchange ideas with others, keep track of your personal and work-related tasks, interact with your critical applications, and zero in on your own projects and interests.

Oracle WebCenter can publish Discoverer portlet content to ensure that all the information you require to make informed decisions is within easy reach.

This appendix discusses integrating Oracle BI Discoverer portlets with Oracle WebCenter Spaces.

Adding Discoverer Portlets in Oracle WebCenter Spaces

Discoverer portlets are standard PDK-Java portlets or JSR 168-Compliant portlets, which Oracle WebCenter supports.

To publish Discoverer portlets on Oracle WebCenter, you must first register the Discoverer Portlet Provider with Oracle WebCenter and then add the required Discoverer portlet.

For more information about registering Discoverer PDK-Java Portlet Provider, see the "Registering Oracle PDK-Java Producers" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

Note: The registration URL for the Discoverer PDK-Java Portlet Provider is `http://host:port/discoverer/portletprovider`.

For more information about registering Discoverer WSRP Portlet Provider, see the "Registering WSRP Producers" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle WebCenter*.

Note: The registration URL for the Discoverer WSRP Portlet Provider is `http://host:port/discoverer/portlets/wsrp2?WSDL`.

After you register the Discoverer Portlet Provider, you can add Discoverer portlets to Pages in the Oracle WebCenter Spaces. For information about adding Discoverer portlets to Oracle WebCenter, see the "Adding Portlets to a Page" chapter in the *Oracle Fusion Middleware User's Guide for Oracle WebCenter*.

Note: If you use Discoverer portlets with Oracle WebCenter then you must ensure that both components are associated with the same Oracle Internet Directory.

Customizing Discoverer Portlets in Oracle WebCenter

To edit a Discoverer portlet and define Discoverer connections for the portlet, use the Customize option in the Action menu that is displayed on the portlet.

Publishing Discoverer Worksheets in Oracle WebLogic Portal

Oracle WebLogic Portal lets you surface application data and functionality from heterogeneous environments into an integrated, dynamic, and customizable Web-based portal user interface that can simultaneously support your customers, partners, and employees on multiple devices.

For more information about Oracle WebLogic Portal, see *Oracle Fusion Middleware Overview for Oracle WebLogic Portal*.

This appendix discusses publishing Oracle BI Discoverer portlets in Oracle WebLogic Portal.

Adding Discoverer Portlets in Oracle WebLogic Portal

Oracle WebLogic Portal supports publishing the Discoverer WSRP portlets as "remote portlets". For more information about managing remote portlets in Oracle WebLogic Portal, see *Oracle Fusion Middleware Federated Portals Guide for Oracle WebLogic Portal*.

You can use the WebLogic Portal Administration Console to locate remote producers, discover the resources they offer, and add them to the Portal Resources Library.

Note: You can log in to the WebLogic Portal Administration Console only if you have a WebLogic Server system administrator or a WebLogic Portal administrator user name and password.

To add a Discoverer portlet on Oracle WebLogic Portal, you must first register the Discoverer WSRP Portlet Provider as a Weblogic Portal Producer by following the procedure as described in the "Adding a Producer" section in *Oracle Fusion Middleware Federated Portals Guide for Oracle WebLogic Portal*.

Note: In the Add Producer wizard, select the Provide Producer WSDL URL option and enter the URL of Discoverer Portlet Provider in the form:

```
http://host:port/discoverer/portlets/WSRPservice_
version?WSDL
```

For example:

```
http://myserver:80/discoverer/portlets/wsrp2?WSDL
```

After you add the Discoverer WSRP Portlet Provider to the Portal Resources Library, you should add required Discoverer portlets from the Remote Producer to the Library by following the procedure as described in the "Adding a Remote Portlet to the Portal Library section" in *Oracle Fusion Middleware Federated Portals Guide for Oracle WebLogic Portal*.

After a remote portlet is added to the Library, you can add the portlet to an existing portal or a new portal. For more information about creating a new portal and desktop (a view of the portal) by using the WebLogic Portal Administration Console, see the "Managing Portal Desktops" chapter in *Oracle Fusion Middleware Portal Development Guide for Oracle WebLogic Portal*.

In Oracle WebLogic Portal, a Page is a portal resource that acts as container for portlets. In order to publish Discoverer Portlets on a portal, you must create a Page and add portlets from the Library to the Page as described in the "Managing Portlets Using the Administration Console" section of *Oracle Fusion Middleware Portlet Development Guide for Oracle WebLogic Portal*.

Configuring Discoverer Portlets in Oracle WebLogic Portal

To publish Discoverer content in a Discoverer portlet on Oracle WebLogic Portal, click the Configure icon and specify the Discoverer connection and worksheet details.

Index

C

customizing worksheets shown in a portlet, 3-10

D

Discoverer

- about, 1-1
- components, 1-1

Discoverer Gauges portlet

- adding, 3-7

Discoverer List of Worksheets portlet

- adding to an Oracle Portal page, 3-4

Discoverer Portlet Provider

- Gauges portlet, 1-4
- List of Worksheets portlet, 1-5
- specifying index values for parameters, 3-14
- test URL, 1-9
- testing, 1-9
- types of portlet, 1-3
- using, 3-4, 3-5, 3-7
- Worksheet portlet, 1-3

Discoverer Viewer

- about, 1-1

Discoverer Worksheet portlet

- adding, 3-5
- resizing graphs, 3-11

G

Gauge portlet, 1-3

graph size, 3-11

I

index values

- in Portal Page parameter forms, 3-14

L

List of Worksheets portlet, 1-3

O

Oracle Portal

- about, 1-5
- Discoverer Worksheet portlet, 1-3

publishing Discoverer portlets, 3-1, 4-1

test URL for Discoverer Portlet Provider, 1-9

P

parameter

- index values in Oracle Portal, 3-14

parameters

- about using worksheet parameters in Discoverer portlets, 3-13
- adding simple parameter form portlets to Oracle Portal pages, 3-20
- mapping to Discoverer Portlet parameters, 3-15

performance

- changing Discoverer default performance settings, 2-6

portlet parameters, 3-15

portlets

- about Gauges portlet, 1-4
- about List of Worksheets portlet, 1-5
- about Worksheet portlet, 1-3
- customizing, 3-9
- customizing worksheets shown in a portlet, 3-10
- editing, 3-8
- Gauges, 3-7
- List of Worksheets, 3-4
- Worksheet, 3-5

R

registering Discoverer Portlet Provider, 2-1

resizing graphs, 3-11

S

simple parameter form portlet

- adding to an Oracle Portal page, 3-20

T

testing

- Discoverer portlet provider, 1-9

W

Worksheet portlet, 1-3

