

# **Oracle® Business Intelligence Discoverer Viewer**

User's Guide

10g Release 2 (10.1.2.1)

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# Contents

<b>Preface</b> .....	vii
Intended Audience .....	vii
Documentation Accessibility .....	vii
Related Documents .....	viii
Conventions .....	viii
JGoodies License Agreement .....	viii

## **Part I    Conceptual and task information**

### **1    Introducing Oracle Business Intelligence Discoverer Viewer**

<b>What is Oracle Business Intelligence Discoverer?</b> .....	1-1
<b>Why use Discoverer Viewer?</b> .....	1-2
Easy-to-use Interface .....	1-3
Consistency with Discoverer Plus and Discoverer Desktop .....	1-3
Familiar Browser Facilities with Discoverer Viewer .....	1-3
Database Security .....	1-3
Integration and Customization .....	1-3
JavaScript Enhanced User Interface .....	1-3
National Language Support .....	1-4
Publish to Oracle Portal .....	1-4
<b>What are the new features in Oracle Business Intelligence Discoverer Viewer 10g Release 2 (10.1.2)</b> .....	1-4
<b>What are workbooks?</b> .....	1-5
<b>What are worksheets?</b> .....	1-5
<b>About Discoverer worksheet types</b> .....	1-5
About table worksheets .....	1-5
About crosstab worksheets .....	1-6
<b>What are the components of a cube?</b> .....	1-6
What are measures? .....	1-6
What are dimensions and dimension members? .....	1-6
What are dimension hierarchies? .....	1-7
What are dimension attributes? .....	1-7

### **2    Starting Discoverer Viewer**

<b>What is a Discoverer connection?</b> .....	2-1
<b>About starting Discoverer Viewer</b> .....	2-2
<b>How to display the Discoverer Viewer connections page</b> .....	2-2
<b>How to start Discoverer Viewer using an existing connection</b> .....	2-3
<b>How to start Discoverer by connecting directly</b> .....	2-5
<b>How to exit Discoverer Viewer</b> .....	2-7
<b>Frequently asked questions</b> .....	2-7
What is the End User Layer (EUL)? .....	2-8

What are database accounts? .....	2-8
How do I create and save login information in a Discoverer connection? .....	2-8
How do I edit a Discoverer connection? .....	2-10
How do I delete a Discoverer connection? .....	2-11
What are public connections? .....	2-12
What are user-defined connections? .....	2-12
When and why do I need to change my password? .....	2-12
How do I change the password for a connection? .....	2-12
How do I change the End User Layer for a Discoverer connection? .....	2-13
What is Single Sign-On? .....	2-13
What is the difference between Single Sign-On and Discoverer passwords? .....	2-13

### 3 Analyzing data with Discoverer Viewer

<b>How to open a Discoverer worksheet</b> .....	3-1
<b>How to save worksheets</b> .....	3-3
<b>How to preview worksheets before printing</b> .....	3-4
<b>How to print worksheets</b> .....	3-4
<b>Exporting Discoverer worksheets</b> .....	3-5
How to export Discoverer worksheets .....	3-5
What are the implications of using different export formats? .....	3-5
How to configure a client machine to automatically open exported Excel files .....	3-7
<b>How to send Discoverer worksheets in an email</b> .....	3-8
<b>How to format worksheet items and cells</b> .....	3-8
<b>Using conditional formatting in Discoverer</b> .....	3-9
What is a conditional format? .....	3-9
What is a stoplight format? .....	3-10
What is a conditional header format? .....	3-10
How to activate and deactivate conditional formats .....	3-10
How to change the precedence of conditional format .....	3-11
How to create a conditional format .....	3-11
How to create a stoplight format .....	3-12
How to create a conditional header format .....	3-12
How to edit conditional formats .....	3-13
How to delete conditional formats .....	3-13
<b>Using graphs in Discoverer Viewer</b> .....	3-14
About using graphs .....	3-14
How to edit a graph .....	3-14
How to display or hide a graph .....	3-15
<b>Using parameters in Discoverer Viewer</b> .....	3-15
About using indexes and values in parameters .....	3-15
How to apply different parameter values to worksheets .....	3-16
About error when using lists of values .....	3-16
<b>How to sort items and measures in a worksheet</b> .....	3-16
<b>About drilling in Discoverer Viewer</b> .....	3-17
<b>How to drill down in worksheets</b> .....	3-17
<b>How to drill up in worksheets</b> .....	3-18
<b>How to change the layout of a worksheet</b> .....	3-18

How to apply saved selections.....	3-19
------------------------------------	------

## Part II Reference information

### 4 Dialog reference

About Viewer page.....	4-3
Choose attachment type (send as email attachment).....	4-4
Choose export type page .....	4-5
Component Disabled page.....	4-6
Conditional Formats (Table/Crosstab) page.....	4-7
Create Conditional Cell Format page.....	4-9
Create Conditional Header Format page .....	4-14
Create Stoplight Format page .....	4-16
Drill page .....	4-18
Edit Parameters page .....	4-19
Error page.....	4-21
Export Ready page.....	4-22
Format Cells page.....	4-23
Format Worksheet data links page.....	4-26
Logged Out page.....	4-27
Multiple Sort page .....	4-28
PDF Ready page.....	4-29
PDF Sample Ready page.....	4-30
Preferences page .....	4-31
Printable Page Options page: Content tab .....	4-34
Printable Page Options page: Page Setup tab.....	4-37
Query Cancelled page .....	4-40
Query Confirmation needed page .....	4-41
Query Progress page.....	4-42
Save Warning page.....	4-43
Save Workbook As page .....	4-44
Search and Select page .....	4-45
Send Email page .....	4-47
Table / Crosstab Layout page .....	4-48
Worksheet Display page .....	4-49
Worksheet Display page: (Actions and Worksheet links) .....	4-51
Worksheet Display page: (Graph tools).....	4-53
Worksheet Display page: (Page level tools and controls).....	4-56
Worksheet Display page: (Table/Crosstab tools).....	4-58
Worksheet List page.....	4-62
Worksheet Options page.....	4-64

### Index



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# Preface

Welcome to Oracle Business Intelligence Discoverer Viewer - the tool that enables you to analyze business data.

## Intended Audience

Use this guide when you want to use Discoverer to view data to support business decisions and you want to know how to:

- use existing workbooks to find the information you are interested in
- format the information to meet your requirements
- analyze the information in different ways
- share the information with other users

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

## Conventions

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

Convention	Meaning
<b>boldface</b>	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, e.g. choose the menu, then the command under that menu.

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# Part I

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## Conceptual and task information

This section contains conceptual and task information about Oracle Business Intelligence Discoverer Viewer.



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# Introducing Oracle Business Intelligence Discoverer Viewer

This chapter introduces you to Oracle Business Intelligence Discoverer Viewer, and contains the following topics:

- ["What is Oracle Business Intelligence Discoverer?"](#)
- ["Why use Discoverer Viewer?"](#)
- ["What are the new features in Oracle Business Intelligence Discoverer Viewer 10g Release 2 \(10.1.2\)"](#)
- ["What are workbooks?"](#)
- ["What are worksheets?"](#)
- ["About Discoverer worksheet types"](#)
- ["What are the components of a cube?"](#)

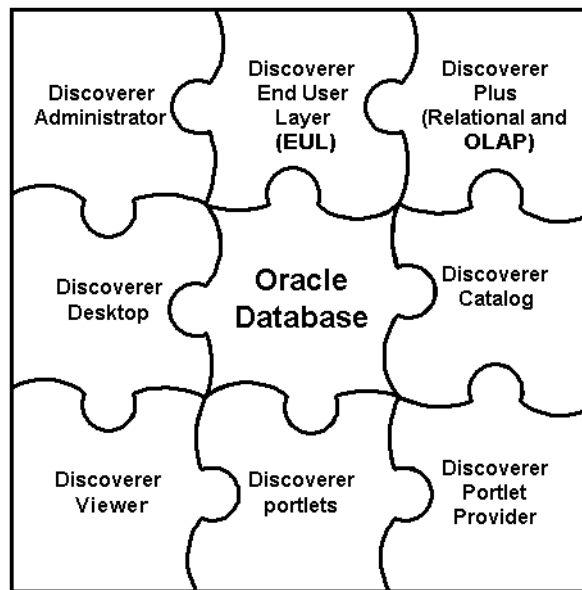
## What is Oracle Business Intelligence Discoverer?

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 a number of integrated components that work together with the Oracle database to give you a complete and integrated Business Intelligence solution.

**Figure 1–1 The Discoverer BI toolset**



Which Oracle Business Intelligence Discoverer component you use will depend on what you want to do. For example:

- if you want to create new worksheets and analyze data from both relational and multi-dimensional data sources across the Web, you will use Discoverer Plus (Relational and OLAP)
- if you want to create new worksheets and analyze data from relational data sources using a Windows application on a PC, you will use Discoverer Desktop
- if you want to analyze data in existing worksheets, you will use Discoverer Viewer or Discoverer portlets (that have been added to an Oracle Portal page using Discoverer Portlet Provider)
- if you want to display Discoverer worksheets as gauges in dashboard-style portals, you will use Discoverer Portlet Provider and Discoverer portlets
- if you want to manage the end user view of relational data, you will use Discoverer Administrator

The Oracle Business Intelligence Discoverer components use definitions of Discoverer objects stored in the Discoverer End User Layer or the Discoverer Catalog.

## Why use Discoverer Viewer?

Decision makers today need a business intelligence solution to track up-to-the-minute company information and key performance indicators. Part of Oracle Business Intelligence, OracleBI Discoverer Viewer is an intuitive ad hoc query, reporting and analysis tool that gives business users immediate access to information from data warehouses, datamarts and online transactional processing systems.

Using Discoverer Viewer, business users can easily turn data into information and publish it seamlessly throughout the enterprise using a familiar and intuitive user interface, the Web browser.

Reasons why you use Discoverer Viewer are as follows:

- **"Easy-to-use Interface"**

- "Consistency with Discoverer Plus and Discoverer Desktop"
- "Familiar Browser Facilities with Discoverer Viewer"
- "Database Security"
- "Integration and Customization"
- "JavaScript Enhanced User Interface"
- "National Language Support"
- "Publish to Oracle Portal"

## Easy-to-use Interface

Discoverer Viewer is easy to use and allows you to interact directly with data using familiar terminology and a Web browser. Anyone familiar with using a browser will quickly be able to use Discoverer Viewer.

## Consistency with Discoverer Plus and Discoverer Desktop

Existing business views of the database are immediately available to Discoverer Viewer users. Any reports (workbooks) created using Discoverer Plus or Discoverer Desktop can be run from Discoverer Viewer immediately.

## Familiar Browser Facilities with Discoverer Viewer

All the usual facilities of your Web browser are available:

- bookmark your favorite reports
- use the Back and Forward buttons to navigate
- use the browser Print function for print output
- launch registered applications to process data exported using Discoverer Viewer

## Database Security

Discoverer Viewer uses the existing database security as defined within Discoverer Administrator. No additional setup is required, and no one can view data they are not authorized to see. When used with Oracle Applications, Discoverer Viewer uses the Oracle Applications security model, including the use of roles and responsibilities. Discoverer Viewer is the only business intelligence product to integrate directly with the Oracle Applications security model.

## Integration and Customization

Discoverer Viewer can be used as a standalone business intelligence tool or can be used to integrate database output into your Web site and portal. In addition, Discoverer Viewer is easily customized to fit in with your Web site look and feel, to incorporate your company's logo or other artwork, or to build custom Discoverer applications for the Web. For more information, see the *Oracle Business Intelligence Discoverer Configuration Guide*.

## JavaScript Enhanced User Interface

Discoverer Viewer uses JavaScript to enhance the user interface. To benefit from this enhanced user interface, you must have JavaScript and Cookie support enabled in

your browser. For more information on JavaScript and Cookie support in your browser, see the browser's documentation.

## National Language Support

Discoverer Viewer supports many different languages. You can specify your preferred language by choosing from a drop down list on either the Connect page or the Options page. The drop down list on the Connect page defaults to your preferred language (as set in your browser). For more information on setting your preferred language, see your browser's documentation.

## Publish to Oracle Portal

Using Oracle Portal, you can publish Discoverer workbooks and worksheets to an enterprise information portal quickly and easily. Oracle Portal's intuitive user interface guides you through the publishing process step by step, enabling non-technical business users to create powerful business intelligence portals with ease.

## What are the new features in Oracle Business Intelligence Discoverer Viewer 10g Release 2 (10.1.2)

Oracle Business Intelligence Discoverer Viewer 10g Release 2 (10.1.2) contains the following new and improved features:

- Native support of the database OLAP option - Discoverer Viewer now enables you to analyze multidimensional databases.
- Single Sign-on support for VPDs - Single Sign-On IDs (if used) are propagated to the Virtual Private Database policy being used (for more information, see the *Oracle Business Intelligence Discoverer Configuration Guide*).
- Email support - Send a worksheet as an attachment to an email message (for more information, see ["How to send Discoverer worksheets in an email"](#)).
- Save to database - Save worksheets to the database (for more information, see ["How to save worksheets"](#)).
- Customization - Customize Viewer's look and feel and layout using Oracle Application Server Control (for more information, see the *Oracle Business Intelligence Discoverer Configuration Guide*).
- Enhanced drilling - Drill to related data, and drill directly into graph data to display other Discoverer worksheets or Internet URLs (for more information, see ["About drilling in Discoverer Viewer"](#)).
- Enhanced printing - Define advanced page setup, print preview, generate a sample, and print to PDF format (for more information, see ["How to preview worksheets before printing"](#) and ["How to print worksheets"](#)).
- New export formats - Export to Excel Web Query (\*.iqy) format to run queries in Microsoft Excel sheets, and export to PDF format (for more information, see ["Exporting Discoverer worksheets"](#)).
- Enhanced worksheet formatting - Define conditional formatting and stoplight formatting (for more information, see ["Using conditional formatting in Discoverer"](#)).
- Enhanced parameter handling - Search and select parameters from lists of values, include mandatory or optional parameters, use indexes and values (for more information, see ["Using parameters in Discoverer Viewer"](#)).



- Enhanced graphing capability - New graph types, predefined graph styles, drill in graphs (for more information, see ["Using graphs in Discoverer Viewer"](#)).
- Single Sign-On support for Oracle Applications users - Create and use private connections, and connect directly to an Oracle Applications environment using authenticated OracleAS Single Sign-On users (for more information, see ["About starting Discoverer Viewer"](#)).

## What are workbooks?

Workbooks are Discoverer files that contain worksheets displaying data retrieved from the database. If you are familiar with spreadsheet applications (e.g. Microsoft Excel), think of a workbook as a spreadsheet file. Discoverer workbooks are stored in the database (for relational data) or the Discoverer Catalog (for multidimensional data).

Workbooks typically contain data that is related in some way but organized to show different perspectives.

## What are worksheets?

Worksheets contain the data that you want to analyze, together with a number of Discoverer components to help you analyze the data. For example, a worksheet can contain parameters, totals, percentages, exceptions, and calculations.

If you are familiar with spreadsheet applications (e.g. Microsoft Excel), think of a workbook as a spreadsheet file and worksheets as different sheets in that spreadsheet file.

## About Discoverer worksheet types

In Discoverer you can display data in two different ways:

- in a table worksheet - see ["About table worksheets"](#)
- in a crosstab (i.e. cross-tabular) worksheet - see ["About crosstab worksheets"](#)

## About table worksheets

A table worksheet lists data in rows and columns. The figure below shows an example table worksheet analyzing profit values for cities within a region.

**Figure 1–2 A table worksheet**

+ Region	Department	+ City	Profit SUM
East	VIDEO RENTAL	Atlanta	\$6,968
East	VIDEO SALE	Atlanta	\$23,072
East	VIDEO RENTAL	Boston	\$16,706
East	VIDEO SALE	Boston	\$34,858
Central	VIDEO RENTAL	Chicago	\$7,948
Central	VIDEO SALE	Chicago	\$20,699
Central	VIDEO RENTAL	Cincinnati	\$31,112
Central	VIDEO SALE	Cincinnati	\$69,472
Central	VIDEO RENTAL	Dallas	\$8,733
Central	VIDEO SALE	Dallas	\$13,142
West	VIDEO RENTAL	Denver	\$16,898

**Note:** The table worksheet style is only used for analyzing relational data.

## About crosstab worksheets

A crosstab worksheet (short for cross-tabulated worksheet) relates two different sets of data and summarizes their interrelationship in terms of a third set of data. The figure below shows an example crosstab analyzing profit values for regions by department.

**Figure 1–3 A crosstab worksheet**

a	Region	Central	East	West
b	Department	Profit SUM	Profit SUM	Profit SUM
c	VIDEO RENTAL	\$116,174.0	\$179,416.6	\$100,693.7
	VIDEO SALE	\$234,498.4	\$363,656.9	\$196,360.1
	Total for <All>	\$350,672.4	\$543,073.5	\$297,053.8

Key to figure:

- a. Top axis, containing the Region item.
- b. Left axis, containing the Department item.
- c. Data points, containing profit sum figures for each region in each department.

The region and department items are displayed as rows and columns on the crosstab. Each row and column intersection shows a data point, which in this case is the profit total for a particular region and a particular department.

## What are the components of a cube?

A cube in a multidimensional data source has the following components:

- A measure, which is the name given to the data itself.
- One or more dimensions. Dimension is the name given to the parts of the cube that categorize the data, such as Product, Geography, and Time. Dimensions have dimension members, dimension hierarchies, and attributes.

The cube contains a measure value for each possible combination of the different dimensions. It is therefore very quick for applications such as Discoverer Plus OLAP to find the value for sales of a particular product in a particular city in a particular year.

## What are measures?

In OLAP metadata, measures represent data that can be examined and analyzed in crosstabs and graphs. Examples include Sales, Cost, and Profit.

## What are dimensions and dimension members?

Measures have dimensions that categorize the data in the measure. For example, a Sales measure might have Product, Time, and Geography as its dimensions. When a measure has a particular dimension, the measure is said to be dimensioned by that dimension. For example, Sales is dimensioned by Product. The group of dimensions for a measure constitute the dimensionality of that measure. For example, the dimensionality of Sales is Product, Time, and Geography.

Each element in a dimension is a dimension member. For example, January 2001, February 2001, March 2001, Quarter 1 2001, and the year 2001 are likely members of the Time dimension.

## What are dimension hierarchies?

A dimension hierarchy describes a hierarchical relationship between two or more dimension members.

Individual dimension members might be related to each other in a hierarchical way. For example, a specific day belongs to a particular month, which in turn is within a particular year. To reflect such relationships, dimension members are organized into dimension hierarchies.

A dimension hierarchy is a logical structure that uses ordered levels as a means of organizing and aggregating data. For example, the Time dimension might have a hierarchy to aggregate data from the Month level to the Quarter level to the Year level.

A dimension can have more than one hierarchy. For example, as well as the Month-Quarter-Year dimension hierarchy, the Time dimension might also have a Day-Month-Year dimension hierarchy. Note that where multiple dimension hierarchies exist for the same dimension, one dimension hierarchy must be specified as the default hierarchy.

## What are dimension attributes?

A dimension attribute describes a characteristic that is shared by dimension members. Dimension attributes enable you to select data based on similar characteristics. For example, a Product dimension might have a Color attribute that enables you to search for all red products.



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## Starting Discoverer Viewer

This chapter explains how to start Discoverer Viewer, and contains the following topics:

- ["What is a Discoverer connection?"](#)
- ["About starting Discoverer Viewer"](#)
- ["How to display the Discoverer Viewer connections page"](#)
- ["How to start Discoverer Viewer using an existing connection"](#)
- ["How to start Discoverer by connecting directly"](#)
- ["How to exit Discoverer Viewer"](#)
- ["Frequently asked questions"](#)

### What is a Discoverer connection?

A Discoverer connection stores login details that enable you to connect to Discoverer Viewer. Each connection stores the following information:

- database user name
- database password
- database name
- (optional) Oracle Applications responsibility
- language
- EUL (relational data only)

Discoverer login details are saved automatically when you create a connection. From then on, you can start Discoverer Viewer simply by clicking on a connection name in the Discoverer connections list that is displayed when you run Discoverer Viewer.

The Discoverer manager can also create public connections. Public connections enable you to start Discoverer and access workbooks without having to create your own connections. You cannot edit or delete public connections. Only the Discoverer manager can create, edit, and delete public connections.

#### Notes

- You can also start Discoverer Viewer without creating a connection, by connecting directly (for more information, see ["How to start Discoverer by connecting directly"](#)).

- For more information about saving login information in a private connection, see ["How do I create and save login information in a Discoverer connection?"](#).
- If you require login details to enable you to create your own Discoverer Viewer connections, contact the Discoverer manager.

## About starting Discoverer Viewer

The table below show the different ways in which you can start Discoverer Viewer.

To start Discoverer Viewer:	Use this method when:
use an existing pre-defined connection (known as a public connection) created by the Discoverer manager	the Discoverer manager has created login details for you so that you do not have to supply login details yourself (for more information, see <a href="#">"How to start Discoverer Viewer using an existing connection"</a> )
use an existing user-defined connection (known as a private connection) that you created yourself	you want to connect to Discoverer Viewer using login details that you saved previously (for more information, see <a href="#">"How to start Discoverer Viewer using an existing connection"</a> )
create a new user-defined connection (known as a private connection)	you want to connect to Discoverer Viewer using a new login (for more information, see <a href="#">"How do I create and save login information in a Discoverer connection?"</a> )
connect directly by entering login details (which are not saved in a connection)	you want to connect to Discoverer Viewer but you do not want to save the login details for use later (for more information, see <a href="#">"How to start Discoverer by connecting directly"</a> )

Depending on the internet browser you are using and how your company's network server is configured, you might see a dialog about security when you first start Discoverer Viewer. This security dialog appears when Discoverer Viewer requests extra permissions to access the Discoverer server or local devices (e.g. printers). If you do not want to see the dialog every time you connect, select the option "Always trust content from Oracle Corporation." Click Yes (or OK or Grant depending on browser) to continue starting Discoverer Viewer.

When you start Discoverer Viewer, you cannot open multiple browser windows (e.g. for Internet Explorer) and continue to use Discoverer Viewer in the new browser windows. Most Web browsers enable you to open multiple browser windows in parallel (e.g. by using Ctrl + N). To use Discoverer Viewer in multiple browser windows you have to use a new connection for each new browser window.

## How to display the Discoverer Viewer connections page

You display the Discoverer Viewer connections page to select a connection (i.e. a stored set of database login details) to start Discoverer Viewer or to connect to Discoverer Viewer directly. You can also use the Discoverer Viewer connections page to edit and delete Discoverer connections.

To display the Discoverer Viewer connections page:

1. Launch a Web browser.
2. Go to the Discoverer web address given to you by the Discoverer manager.

**Hint:** The Discoverer web address 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 (e.g. a typical URL might be  
http://machinename.myorganization.com:7777/discoverer/viewer)
- a link from a portal or other internet or intranet site that you are using

The Connect to OracleBI Discoverer page is displayed.



A list of the existing Discoverer connections is displayed in the **Connection** column.

### Notes

- For information on how to create and save a private Discoverer connection, see "[How do I create and save login information in a Discoverer connection?](#)".
- If this page does not display any connections or the Create Connection button:
  - you can connect to Discoverer by entering connection details in the Connect Directly area (for more information, see "[How to start Discoverer by connecting directly](#)")
  - Discoverer has not been associated with an infrastructure (for more information, ask the Discoverer manager)

## How to start Discoverer Viewer using an existing connection

When you start Discoverer Viewer using an existing connection, you can use one of the following:

- an existing public connection created by the Discoverer manager
- an existing private connection that you created earlier

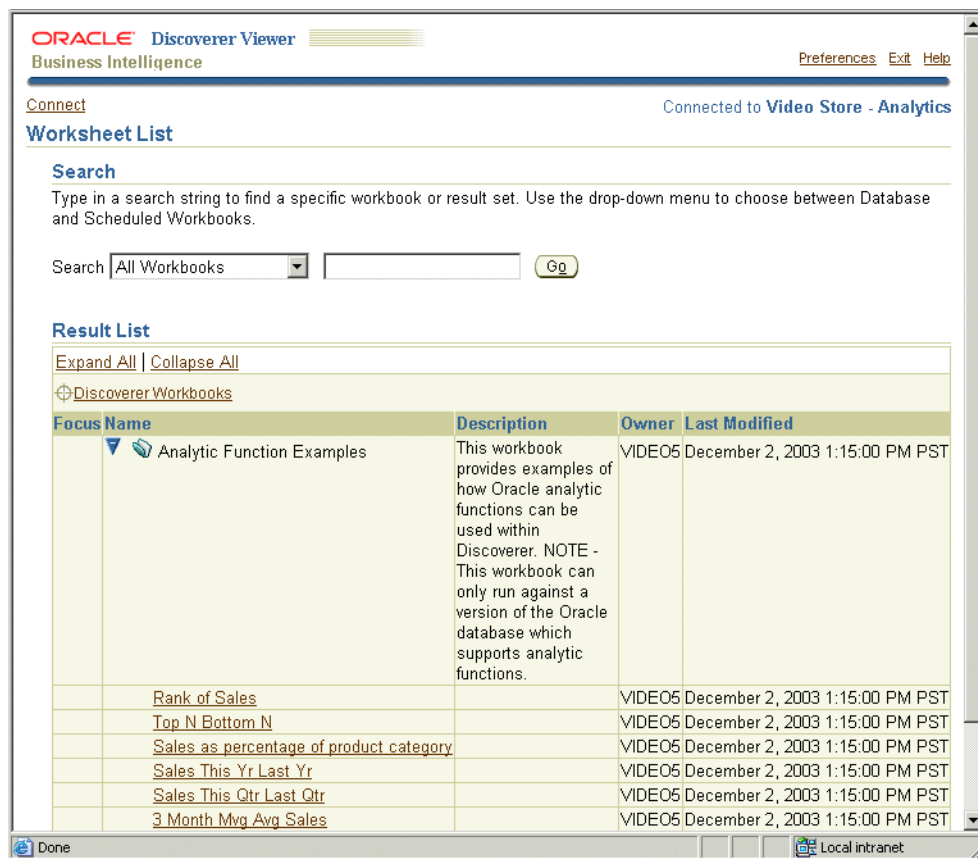
To start Discoverer Viewer using an existing connection:

1. Display the Discoverer Viewer connections page (for more information, see ["How to display the Discoverer Viewer connections page"](#)).
2. Select the name of a connection name in the **Connection** column to start Discoverer Viewer.

**Hint:** To confirm that you are using the correct connection, click Show in the Details column to display more information about a connection. To hide additional information, click Hide.

**Note:** If you have already used Oracle's Single Sign-On functionality to establish a database connection, you will not be prompted for password information when you start Discoverer Viewer.

Discoverer Viewer starts and displays the ["Worksheet List page"](#), which enables you to locate and select a worksheet to open.



You can open any worksheet accessible to the database username used in the current connection. If you cannot see the worksheet that you want to open, you might need to use a different connection.

3. Select the + icon next to a workbook to display the worksheets contained in that workbook (or select the icon in the **Focus** column next to a workbook).
4. Select the name of the worksheet you want to analyze in the **Name** column.

Discoverer Viewer displays the selected worksheet.



The screenshot displays the Oracle Discoverer Viewer Business Intelligence interface. The title bar reads "ORACLE Discoverer Viewer Business Intelligence". The menu bar includes "Preferences", "Exit", and "Help". The breadcrumb trail shows "Connect > Workbooks". The main title is "Analytic Function Examples - Rank of Sales", with a subtitle "Last run May 6, 2004 9:49:54 AM PDT". The status bar at the bottom indicates "Connected to Video Store - Analytics".

On the left, there are two panels: "Actions" and "Worksheets". The "Actions" panel lists: "Rerun query", "Save as", "Revert to saved", "Printable page", "Export", "Send as email", and "Worksheet options". The "Worksheets" panel lists: "Rank of Sales", "Top N Bottom N", "Sales as percentage of pr...", "Sales This Yr Last Yr", "Sales This Qtr Last Qtr", and "3 Month Mvg Avg Sales".

The main content area displays a report titled "Sales Analysis by Year, Region and City" with the description "This report uses the rank function to show the rank of cities based on sales figures". Below the title is a "Table" section with a "Tools" menu (Layout, Format, Stoplight, Sort, Rows and Columns) and a "Page Items" section showing "Calendar Year" set to "1998".

	Region	City	Sales SUM	Rank Sales
1	Central	Cincinnati	\$69,637.26	1
2		Louisville	\$61,235.80	2
3		St. Louis	\$35,818.75	3
4		Minneapolis	\$17,385.87	4
5		Chicago	\$16,432.74	5
6		Dallas	\$15,331.05	6
7		Nashville	\$14,576.83	7
8	East	New York	\$143,499.01	1
9		Washington	\$62,312.53	2
10		Philadelphia	\$35,417.44	3
11		Boston	\$33,475.06	4
12		Atlanta	\$32,399.73	5

The status bar at the bottom shows "Done" and "Local intranet".

You can now begin to analyze data using Discoverer Viewer's powerful analysis tools.

### Notes

- For information on how to create and save a private Discoverer connection, see ["How do I create and save login information in a Discoverer connection?"](#).

## How to start Discoverer by connecting directly

You start Discoverer by connecting directly when you want to connect to Discoverer but you do not want to save the login details for use later.

To start Discoverer by connecting directly:

1. Display the Discoverer Viewer connections page (for more information, see ["How to display the Discoverer Viewer connections page"](#)).
2. Select the Connect Directly link to display the Connect Directly area.

**Show wrong DB**

- Show wrong EUL
- Show wrong password
- Show wrong user name

**Connect Directly** [Return to Top](#)

Enter your connection details below to connect directly to Discoverer.

\* Indicates required field.

Connect To: OracleBI Discoverer

\* User Name:

\* Password:

\* Database:

\* End User Layer:

Locale: Locale retrieved from browser

[Exit](#) | [Help](#)

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[About Discoverer Viewer Version 10.0.2.20.24d](#)

3. Enter login details using the fields provided (e.g. User Name, Password, Database).
4. Click Go to start Discoverer.

Discoverer Viewer starts and displays the "Worksheet List page", which enables you to locate and select a worksheet to open.

**ORACLE Discoverer Viewer** Business Intelligence [Preferences](#) [Exit](#) [Help](#)

[Connect](#) Connected to Video Store - Analytics

**Worksheet List**

**Search**

Type in a search string to find a specific workbook or result set. Use the drop-down menu to choose between Database and Scheduled Workbooks.

Search: All Workbooks

**Result List**

[Expand All](#) | [Collapse All](#)

[Discoverer Workbooks](#)

Focus Name	Description	Owner	Last Modified
▼ Analytic Function Examples	This workbook provides examples of how Oracle analytic functions can be used within Discoverer. NOTE - This workbook can only run against a version of the Oracle database which supports analytic functions.	VIDEO5	December 2, 2003 1:15:00 PM PST
Rank of Sales		VIDEO5	December 2, 2003 1:15:00 PM PST
Top N Bottom N		VIDEO5	December 2, 2003 1:15:00 PM PST
Sales as percentage of product category		VIDEO5	December 2, 2003 1:15:00 PM PST
Sales This Yr Last Yr		VIDEO5	December 2, 2003 1:15:00 PM PST
Sales This Qtr Last Qtr		VIDEO5	December 2, 2003 1:15:00 PM PST
3 Month Mvg Avg Sales		VIDEO5	December 2, 2003 1:15:00 PM PST

5. Select the + icon next to a workbook to display the worksheets contained in that workbook (or select the icon the **Focus** column next to a workbook).
6. Select the name of the worksheet you want to analyze in the **Name** column.

Discoverer Viewer displays the selected worksheet.

The screenshot shows the Oracle Discoverer Viewer Business Intelligence interface. The title bar indicates 'Connected to Video Store - Analytics'. The main content area displays a report titled 'Sales Analysis by Year, Region and City' with a subtitle 'This report uses the rank function to show the rank of cities based on sales figures'. A table is shown with columns: Region, City, Sales SUM, and Rank Sales. The table data is as follows:

	Region	City	Sales SUM	Rank Sales
1	Central	Cincinnati	\$69,637.26	1
2		Louisville	\$61,235.80	2
3		St. Louis	\$35,818.75	3
4		Minneapolis	\$17,385.87	4
5		Chicago	\$16,432.74	5
6		Dallas	\$15,331.05	6
7		Nashville	\$14,576.83	7
8	East	New York	\$143,499.01	1
9		Washington	\$62,312.53	2
10		Philadelphia	\$35,417.44	3
11		Boston	\$33,475.06	4
12		Atlanta	\$32,399.73	5

The interface also includes a sidebar with 'Actions' (Run query, Save as, Revert to saved, Printable page, Export, Send as email, Worksheet options) and 'Worksheets' (Rank of Sales, Top N Bottom N, Sales as percentage of pr..., Sales This Yr Last Yr, Sales This Qtr Last Qtr, 3 Month Mvg Avg Sales).

You can now begin to analyze data using Discoverer's powerful analysis tools.

## How to exit Discoverer Viewer

When you have finished using Discoverer Viewer to analyze data, exit the application.

To exit Discoverer Viewer:

1. Select the **Exit** link in the header area or footer area of the Discoverer Viewer page.

## Frequently asked questions

This section answers frequently asked questions about starting Discoverer Viewer, and contains the following topics:

- "What is the End User Layer (EUL)?"
- "What are database accounts?"
- "How do I create and save login information in a Discoverer connection?"
- "How do I edit a Discoverer connection?"
- "How do I delete a Discoverer connection?"

- ["What are public connections?"](#)
- ["What are user-defined connections?"](#)
- ["When and why do I need to change my password?"](#)
- ["How do I change the password for a connection?"](#)
- ["How do I change the End User Layer for a Discoverer connection?"](#)
- ["What is Single Sign-On?"](#)
- ["What is the difference between Single Sign-On and Discoverer passwords?"](#)

## What is the End User Layer (EUL)?

The EUL is an intuitive, business-focused view of the a relational database that uses terms that you are familiar with and can easily understand. The EUL insulates you from the complexity usually associated with databases. This enables you to focus on business issues instead of data access issues.

The Discoverer manager creates the EUL so that you see a user-friendly view of the database when you use Discoverer.

If you start Discoverer using a public connection, the Discoverer manager specifies an EUL for you. If you create your own connection, you select the EUL yourself, or accept the default EUL assigned to you (for more information, see ["How do I create and save login information in a Discoverer connection?"](#)).

## What are database accounts?

To use Discoverer, you need a database account that enables you to connect to Discoverer. You store database account details in a Discoverer connection along with EUL and language settings.

**Note:** If your organization uses Single Sign-On (a system for enabling users to log in once to access many different applications), you also need a Single Sign-On account. If you are not sure whether your organization uses Single Sign-On, contact the Discoverer manager. For more information, see ["What is Single Sign-On?"](#).

A database account comprises two pieces of information:

- A username - a short name by which you are identified by the database. For example, video5, or marketing.
- A password - a secret key that you use to authenticate your username. An initial password is created for you by the database administrator. To keep your organization's data secure, do not tell another person what your password is, or write down your password so that other people can read it (for more information, see ["When and why do I need to change my password?"](#)).

## How do I create and save login information in a Discoverer connection?

You create and save login information in a new private Discoverer connection when you want to start Discoverer using login details that you have not saved previously.

To create and save login information in a Discoverer connection:

1. Display the Discoverer connections page (for more information, see ["How to display the Discoverer Viewer connections page"](#)).
2. Click Create Connection to display the Create Connection: Connection Details page.

3. Choose the type of user you want to connect as:
  - to create a relational connection, select OracleBI Discoverer from the **Connect to** drop down list
  - to create a multidimensional connection, select OracleBI Discoverer for OLAP from the **Connect to** drop down list
  - to create a connection to access data in an Oracle Applications environment, select Oracle Applications from the **Connect to** drop down list
4. Enter a connection name by which you want to identify the new connection in the **Connection Name** field.  
 The connection name is displayed in the Connections column on the Connect to OracleBI Discoverer page.
5. (optional) Enter a description of the connection in the **Connection Description** field.  
 For example, you might want to add the names of the workbooks that the connection will be used to access.
6. Select the language that you want to use from the **Locale** drop down list.
7. Specify the username, password, and database details for the connection that you want to create.

**Hint:** If you are not sure what username, password, and database details to enter, contact the Discoverer manager.

**Note:** If you selected Oracle Applications in the **Connect To** drop down list (and you logged in as a Single Sign-On user), Discoverer displays only the **Database** field. You specify a username and password (if required) in subsequent pages.

8. Save the details by doing one of the following:
  - Click Apply to save the details you have specified and return to the Connections list.
  - Click Apply and Connect to save the details you have specified and start Discoverer Viewer using the login details specified.

**Note:** If you selected Oracle Applications in the **Connect To** drop down list (and you logged in as a Single Sign-On user), Discoverer displays the Select Username page or the Enter Username and Password page.

9. If you selected Oracle Applications in the **Connect To** drop down list, do the following:
  - a. Select a username (if the flashlight icon is displayed) or enter a username in the **User Name** field.

**Note:** The **User Name** field is only displayed for a SSO user with more than one associated Oracle Applications username, or for a non-SSO Oracle Applications user.
  - b. Enter a password in the **Password** field (not displayed for a SSO user, if you selected a username using the flashlight icon).
  - c. Click Apply to save the details that you specified.
10. If you selected Oracle Applications in the **Connect To** drop down list and the user has more than one Oracle Applications Responsibility, Discoverer displays the Select Oracle Applications Responsibility page. Do the following:
  - a. Select a responsibility from the **Oracle Applications** drop down list.
  - b. Click Apply to save the details that you specified.
11. (relational data only) If the username has access to more than one End User Layer, the Create Connection: End User Layer page is displayed. Do the following:
  - a. Select an End User Layer from the **End User Layer** drop down list.
  - b. Click Apply to save the details that you specified.

If you clicked Apply, the Connect to OracleBI Discoverer page is displayed. The new connection that you have created is included in the list of connections. To start Discoverer Viewer using the connection that you have created, click the new connection name in the **Connection** list.

If you clicked Apply and Connect, Discoverer Viewer starts and prompts you to select a workbook and worksheet to open.

## How do I edit a Discoverer connection?

You edit a Discoverer connection when you want to change the login details stored in that connection. For example, you might want to change the username that you use to start Discoverer Viewer.

To edit a Discoverer connection:

1. Display the Discoverer Viewer connections page (for more information, see "[How to display the Discoverer Viewer connections page](#)").

2. Select the pencil icon in the **Update** column next to the name of the connection that you want to edit.

**Hint:** To confirm that you are using the correct connection, click Show in the Details column to display more information about a connection. To hide additional information, click Hide.

The Update Connection page is displayed.

3. Change the connection details as required.
4. Save the details by doing one of the following:
  - Click Apply to save the details you have entered and return to the Connections list.
  - Click Apply and Connect to save the details you have entered and start Discoverer Viewer using the login details you specified.
5. If the username has access to more than one End User Layer, the Create Connection: End User Layer page is displayed. Do the following:
  - a. Select an End User Layer from the **End User Layer** drop down list.
  - b. Click Apply to save the details that you specified.

If you clicked Apply, the Connect to OracleBI Discoverer Viewer page is displayed. The new connection that you have created is included in the list of connections. To start Discoverer Viewer using the connection that you have created, click the new connection name in the **Connection** list.

If you clicked Apply and Connect, Discoverer Viewer starts and prompts you to select a workbook and worksheet to open.

### Notes

- You can only edit private connections that you have created yourself. You cannot edit public connections created by the Discoverer manager.

## How do I delete a Discoverer connection?

You delete a Discoverer connection when you want to remove login details permanently. For example, you might want to delete a connection that you no longer need.

To delete a Discoverer connection:

1. Display the Discoverer Viewer connections page (for more information, see "[How to display the Discoverer Viewer connections page](#)").
2. Select the trash can icon in the **Delete** column next to the name of the connection that you want to delete to display the Confirmation dialog.

**Hint:** To confirm that you are deleting the correct connection, click Show in the Details column to display more information about a connection. To hide additional information, click Hide.

3. Click Yes at the confirmation page to delete the connection and return to the Connect to OracleBI Discoverer page.

### Notes

- You can only delete private connections that you have created yourself. You cannot delete public connections created by the Discoverer manager.

## What are public connections?

Public connections are Discoverer logins created by the Discoverer manager. Public connections enable you to start Discoverer Viewer and access workbooks without having to create your own connections.

You cannot edit or delete public connections. Only the Discoverer manager can create, edit, and delete public connections.

## What are user-defined connections?

User-defined connections (also known as private connections) are Discoverer logins that you create yourself. You can edit and delete private connections. Only you can access, edit, and delete the private connections that you create.

## When and why do I need to change my password?

Typically you will have to change your password periodically to maintain data security.

Your system manager specifies how long you can keep the same password before it expires. In other words, how long you can keep the password before you have to change it.

You will know your password has expired if you start Discoverer Viewer and are prompted to enter a new password. When you connect to Discoverer Viewer, you might be warned that your password will expire in a specified number of days. If you do not change the password in this period, you are prompted to enter a new password when the password expires.

It is also important to change your password if you think that someone else has found out what the password is.

## How do I change the password for a connection?

You change the password for a connection when the password:

- has expired
- is about to expire
- has become known by another user

To change the password for a connection:

1. Display the Discoverer Viewer connections page (for more information, see "[How to display the Discoverer Viewer connections page](#)").
2. Select the **Update** icon next to the connection for which you want to change the password.
3. Click Change Database Password.
4. In the **Password** field, enter the current database password for the current username.
5. In the **New Password** field, enter a new database password for the current username.
6. In the **Verify Password** field, re-enter the new database password for the current username.
7. Click Finish.



The Connect to OracleBI Discoverer page is displayed. You can now use the connection to start Discoverer Viewer.

### Notes

- If any of the password details that you entered were invalid, an error message is displayed with advice on which value to change.

## How do I change the End User Layer for a Discoverer connection?

You change the End User Layer (EUL) for a Discoverer connection when you want the connection to start Discoverer using a different EUL (for more information, see ["What is the End User Layer \(EUL\)?"](#)).

To change the EUL for a Discoverer connection:

1. Display the Discoverer Viewer connections page (for more information, see ["How to display the Discoverer Viewer connections page"](#)).
2. Select the Update icon next to the connection for which you want to change the End User Layer.
3. In the **Password** field, enter a valid password for the Discoverer connection.
4. Click Continue.
5. If the username for the current Discoverer connection has access to more than one End User Layer, the Select End User Layer for Discoverer Connection page is displayed. Do the following:
  - a. Select an End User Layer from the **End User Layer** drop down list.
  - b. Click Finish.

The Connect to OracleBI Discoverer page is displayed. You can now use the connection to start Discoverer.

### Notes

- If the username does not have access to more than one End User Layer, you cannot change the default End User Layer.
- If the password that you entered was invalid, an error message is displayed with advice on which value to change.

## What is Single Sign-On?

Single Sign-On is a feature that enables users to log in once to access many different applications.

## What is the difference between Single Sign-On and Discoverer passwords?

If your organization uses Single Sign-On, your Discoverer password is separate to your Single Sign-On password:

- your Single Sign-On password authenticates your Single Sign-On username
- your Discoverer password authenticates your Discoverer username
- with a single Sign-on connection, you can connect using many different Discoverer connections



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## Analyzing data with Discoverer Viewer

This chapter explains how to analyze data with Discoverer Viewer, and contains the following topics:

- ["How to open a Discoverer worksheet"](#)
- ["How to save worksheets"](#)
- ["How to preview worksheets before printing"](#)
- ["How to print worksheets"](#)
- ["Exporting Discoverer worksheets"](#)
- ["How to send Discoverer worksheets in an email"](#)
- ["How to format worksheet items and cells"](#)
- ["Using conditional formatting in Discoverer"](#)
- ["Using graphs in Discoverer Viewer"](#)
- ["Using parameters in Discoverer Viewer"](#)
- ["How to sort items and measures in a worksheet"](#)
- ["About drilling in Discoverer Viewer"](#)
- ["How to drill down in worksheets"](#)
- ["How to drill up in worksheets"](#)
- ["How to change the layout of a worksheet"](#)
- ["How to apply saved selections"](#)
- ["About using indexes and values in parameters"](#)

### How to open a Discoverer worksheet

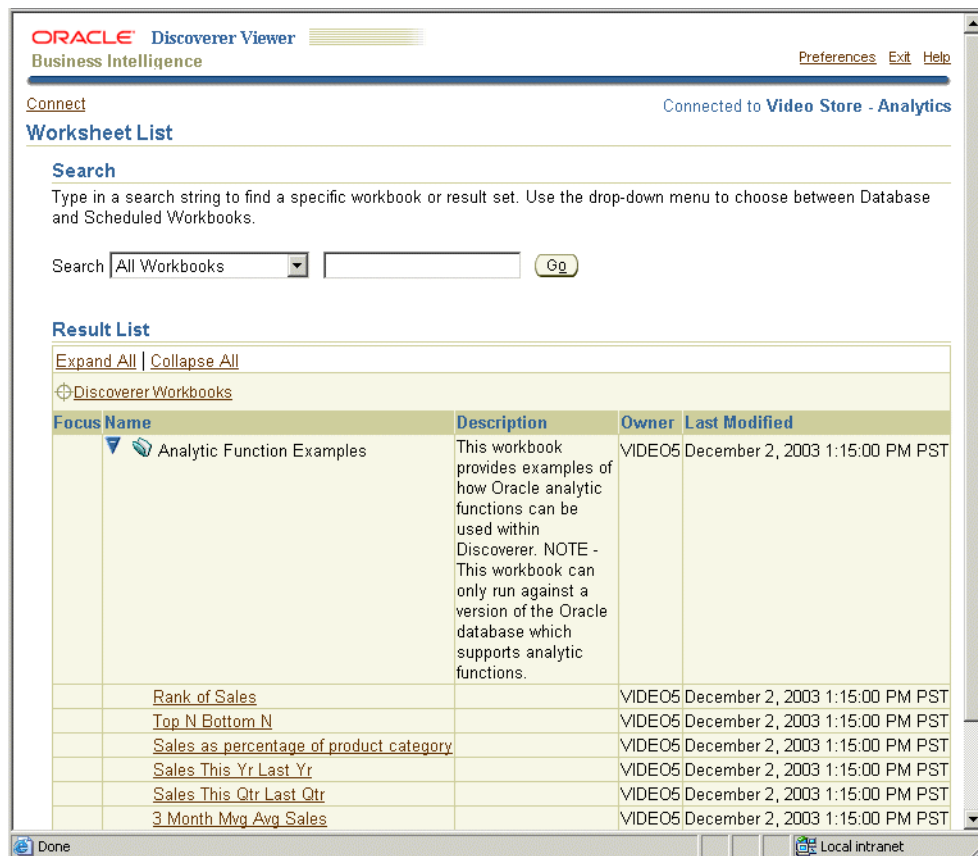
You open a Discoverer worksheet to analyze the data in that worksheet. You can display one worksheet at a time (though you can create multiple Discoverer Viewer browser sessions).

To open a Discoverer worksheet:

1. Start Discoverer Viewer (for more information, see [Chapter 2, "Starting Discoverer Viewer"](#)).

Discoverer starts and displays the ["Worksheet List page"](#), which enables you to locate and select a worksheet to open.

2. Select the + icon next to the workbook containing the worksheet you want to open to display the worksheets in that workbook (or select the icon the **Focus** column next to a workbook).



3. Select the name of the worksheet you want to analyze in the **Name** column. Discoverer displays the selected worksheet.

The screenshot shows the Oracle Discoverer Viewer interface. At the top, it says "ORACLE Discoverer Viewer Business Intelligence". On the right, there are links for "Preferences", "Exit", and "Help". Below the header, it says "Connect > Workbooks" and "Connected to Video Store - Analytics". The main title is "Analytic Function Examples - Rank of Sales", and it notes "Last run May 6, 2004 9:49:54 AM PDT".

On the left, there are two panels: "Actions" and "Worksheets". The "Actions" panel includes links like "Rerun query", "Save as", "Revert to saved", "Printable page", "Export", "Send as email", and "Worksheet options". The "Worksheets" panel lists "Rank of Sales", "Top N Bottom N", "Sales as percentage of pr...", "Sales This Yr Last Yr", "Sales This Qtr Last Qtr", and "3 Month Mvg Avg Sales".

The main content area displays a report titled "Sales Analysis by Year, Region and City". Below the title, it says "This report uses the rank function to show the rank of cities based on sales figures". There is a "Table" section with a "Tools" menu (Layout, Format, Spotlight, Sort, Rows and Columns) and a "Page Items" section with a "Calendar Year" dropdown set to "1998".

	Region	City	Sales SUM	Rank Sales
1	Central	Cincinnati	\$69,637.26	1
2		Louisville	\$61,235.80	2
3		St. Louis	\$35,818.75	3
4		Minneapolis	\$17,385.87	4
5		Chicago	\$16,432.74	5
6		Dallas	\$15,331.05	6
7		Nashville	\$14,576.83	7
8	East	New York	\$143,499.01	1
9		Washington	\$62,312.53	2
10		Philadelphia	\$35,417.44	3
11		Boston	\$33,475.06	4
12		Atlanta	\$32,399.73	5

At the bottom of the window, there is a "Done" button and a "Local intranet" icon.

You can now begin to analyze the worksheet data using Discoverer's powerful analysis tools.

## How to save worksheets

If you have made changes to a worksheet (e.g. you have re-sorted data or repositioned worksheet items), you can save these changes. If you are logged in to Discoverer as the owner of the workbook that contains the worksheet, you can overwrite the original worksheet. If you are not logged in as the owner of the workbook that contains the worksheet, you can save a copy of the worksheet.

If you change a worksheet and then switch to a different worksheet, Discoverer prompts you to save the changes you have made or discard the changes.

To save a worksheet:

1. Display the worksheet that you want to save.

If you own the worksheet, both the Save and Save As options are available. If you do not own the worksheet, only the Save As option is available.

2. Save the worksheet as follows:

If you own the worksheet, do one of the following:

- to save changes to the worksheet, select the **Save** link
- to save the worksheet in a workbook with a different workbook name, select the **Save As** link to display the Save Workbook As page and specify a new workbook name

If you do not own the worksheet, to save the worksheet in a workbook as a different workbook name, select the **Save As** link to display the Save Workbook As page and specify a new workbook name.

Discoverer saves the worksheet in the database in the current workbook. If you use the Save As option, workbooks are always stored in the root folder.

## How to preview worksheets before printing

You preview a worksheet before printing to confirm that the settings in the Print Options page produce the output you expect. For example, you might want to check that margins, spacing, and set up options are correct before printing the worksheets.

You preview a Adobe® Portable Document Format (PDF) version of the worksheet.

Discoverer generates either a sample PDF version of the worksheet, or a full PDF version of the worksheet. The sample PDF version of the worksheet contains data that represents the first 50 rows of data. The full PDF version of the worksheet contains all the rows of data.

To preview a worksheet:

1. Display the worksheet that you want to preview.
2. Select the **Printable Page** link to display the ["Printable Page Options page: Content tab"](#).
3. (optional) Use the ["Printable Page Options page: Content tab"](#) to change the print settings, if required.
4. Click **Preview Sample** to generate a sample PDF version of the worksheet and display the ["PDF Sample Ready page"](#).
5. Click **Open PDF to view sample** to display the sample PDF version of the worksheet in a separate browser window.

You can view, print or save a copy of the sample PDF file from the separate browser window.

## How to print worksheets

You print a worksheet in Discoverer Viewer by generating a Portable Document Format (PDF) version of the worksheet and printing the PDF file in Adobe Acrobat. Discoverer displays the PDF version of the worksheet for you to preview before you print it (for more information, see ["How to preview worksheets before printing"](#)).

To print a worksheet:

1. Display the worksheet that you want to print.
2. Select the **Printable Page** link to display the ["Printable Page Options page: Content tab"](#).
3. (optional) Use the ["Printable Page Options page: Content tab"](#) to change the print settings, if required.
4. (optional) If you want to preview a sample PDF version of the worksheet before printing the full worksheet, follow the steps in ["How to preview worksheets before printing"](#).
5. Click **Printable PDF** to display the ["PDF Ready page"](#).

6. Select the **Click to view or save** link to display the full PDF version of the worksheet in a separate browser window.  
**Note:** You can now view, print, or save the PDF file.
7. In the separate browser window displaying the PDF file, choose File | Print to display the operating system print dialog and print the PDF file.  
Discoverer prints the PDF version of the worksheet.

## Exporting Discoverer worksheets

This section explains how to export worksheets in different formats, and contains the following topics:

- ["How to export Discoverer worksheets"](#)
- ["What are the implications of using different export formats?"](#)
- ["How to configure a client machine to automatically open exported Excel files"](#)

### How to export Discoverer worksheets

You export worksheet data so that you can use the data in a Discoverer worksheet in a different application. For example, you might want to produce a Discoverer worksheet in Microsoft Excel format.

To export a Discoverer worksheet:

1. Display the worksheet that you want to export (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Export** link in the Actions area to display the ["Choose export type page"](#).
3. Select an export type from the drop down list and click Export to display the ["Export Ready page"](#).
4. Click the Click to view or save button to display the exported file in the application associated with that file type.

Discoverer displays the exported file in the application associated with that type of export file (e.g. a browser, Microsoft Excel).

5. (optional) If you want to save the exported file, save the file in the application used for that type of export file (e.g. Microsoft Excel).

### What are the implications of using different export formats?

When you have exported a worksheet to a specified export file format, you might notice differences when you open the exported file in the associated application. These differences are described in the following topics:

- ["What does Discoverer do when you export worksheet data using the XLS file format?"](#)
- ["What does Discoverer do when you export worksheet data using the CSV file format?"](#)

#### What does Discoverer do when you export worksheet data using the XLS file format?

When you export relational worksheet data to the XLS file format, Discoverer:

- sets the MimeType of the worksheet output to application/vnd.ms-excel
- requests the file name to be <worksheet\_name>.xls
- formats worksheet output to be readable by Microsoft Excel

On a machine where Microsoft Excel is installed, the operating system typically associates the XLS file with Microsoft Excel.

**Note:** When you export a worksheet to the XLS file format, it is recommended that you save the XLS file and then open the saved XLS file in Microsoft Excel.

For more information about exporting worksheet data, see ["Choose export type page"](#).

### **What does Discoverer do when you export worksheet data using the CSV file format?**

When you export worksheet data to the CSV file format, Discoverer:

- sets the MimeType of the worksheet output to application/csv
- requests the file name to be <worksheet\_name>.csv

**Note:** The Discoverer server does not format the worksheet output to be readable by Microsoft Excel (because CSV files are often used for other purposes, and to impose Microsoft Excel-specific formatting might be inappropriate).

On a machine where Microsoft Excel is installed, the operating system does not necessarily associate the CSV file with Microsoft Excel:

**Note:** Although you might be able to open a CSV file using Microsoft Excel, it is recommended that you export the worksheet to the XLS file format and then open the XLS file in Microsoft Excel.

For more information about exporting worksheet data, see ["Choose export type page"](#).

### **About exporting Discoverer worksheets to Microsoft Excel Web Query format**

Microsoft Excel Web Query is an external data format in Microsoft Excel that enables you to include dynamic relational data from an Internet or Intranet URL (e.g. a Discoverer worksheet) in a Microsoft Excel worksheet. For example, you might want to create a Microsoft Excel worksheet that contains a Discoverer sales report for a range of dates that you specify when you open the worksheet in Microsoft Excel. The Microsoft Excel worksheet stores the query used to obtain the Discoverer data, so that the data can be refreshed automatically.

Discoverer enables you to export Discoverer data to Microsoft Excel Web Query format by selecting Web Query for Microsoft Excel 2000+ (\*.iqy) from the list of export types. End users can then access dynamic Discoverer worksheets in Microsoft Excel. You can export data to Microsoft Excel Web Query format from both Discoverer Plus and Discoverer Viewer.

#### **Notes**

- Web Query for Microsoft Excel 2000+ (\*.iqy) format is not available in a Single Sign-On environment. Contact the Discoverer manager or Oracle administrator for more information.
- To access Discoverer reports exported to Microsoft Excel Web Query format, Microsoft Excel end users require Microsoft Excel 2000 (or later) and Microsoft Internet Explorer 5.0 (or later).



- You can only export numeric and textual data into Microsoft Excel Web Query format. You cannot export Discoverer graphs into Microsoft Excel Web Query format.
- Once you have imported a Discoverer report to Microsoft Excel, refresh the sheet in Excel when you want to display up-to-date data. Please refer to Microsoft Excel documentation for more information about how to refresh data in Microsoft Excel.

**Note:** For more information about exporting worksheet data to Microsoft Excel Web Query format, Refer to *Oracle Business Intelligence Discoverer Plus User's Guide*.

## How to configure a client machine to automatically open exported Excel files

To enable your client machine to automatically open exported Excel files, you need to configure settings as described in the following topics:

- ["How to configure Microsoft Windows to display a dialog that prompts you to open or save the export file"](#)
- ["How to configure Internet Explorer to display the Download complete dialog"](#)
- ["How to configure the macro security level setting to enable you to open an exported Discoverer worksheet in Microsoft Excel"](#)

### How to configure Microsoft Windows to display a dialog that prompts you to open or save the export file

To configure Microsoft Windows to display a dialog that prompts you to open or save the export file:

1. Choose Settings | Control Panel | Folder Options from the Windows Start menu.
2. Display the list of Windows File Types.
3. Select the File Type for which you want to display a prompt dialog to open or save the export file.
4. Click Advance to display the Edit File Type dialog.
5. Select the Confirm open after download check box (a MIME type property of the file type).
6. Click OK.

### How to configure Internet Explorer to display the Download complete dialog

To configure Internet Explorer to display a Download Complete dialog when the export is complete:

1. Open Internet Explorer and choose Tools | Internet Options | Advanced tab.
2. Select the Notify when downloads complete check box.
3. Click OK.

### How to configure the macro security level setting to enable you to open an exported Discoverer worksheet in Microsoft Excel

Excel will not allow you to open a Discoverer worksheet exported to an XLS file if the macro security level in Excel is set to High. Excel displays an alert and prevents you from opening the worksheet.

To configure the macro security level setting to enable you to open an exported Discoverer worksheet in Microsoft Excel:

1. Open Microsoft Excel and select Tools | Macro | Security Level tab.
2. Select the **Medium** radio button.
3. Click OK.

## How to send Discoverer worksheets in an email

You can send a copy of the currently displayed worksheet to one or more email recipients in a range of formats.

To send a Discoverer worksheet in an email:

1. Display the worksheet that you want to send (for more information, see "[How to open a Discoverer worksheet](#)").
2. Select the **Send as email** link in the Actions area to display the "[Choose attachment type \(send as email attachment\)](#)".
3. Select an export type from the drop down list and click Next to display the "[Send Email page](#)".
4. Use the "[Send Email page](#)" to enter the email addresses of the intended email recipients, and create the email message.
5. (optional) If you want to display the attached worksheet file, click View Attachment, to display the worksheet in an appropriate software package (e.g. Microsoft Excel).
6. Click Finish to send the email.

**Note:** Discoverer sends the email using the IMAP settings specified by the Discoverer manager.

**Note:** Discoverer sends the email as a Zip file using the IMAP settings specified by the Discoverer manager.

## How to format worksheet items and cells

You format worksheet items and cells to change their appearance (e.g. text font, text color, background color). On table worksheets, you format worksheet items, but not individual worksheet cells. On crosstab worksheets, you can format worksheet items and individual worksheet cells.

**Hint:** You can select more than one worksheet item or cell by pressing the Ctrl key and clicking another worksheet item or cell.

To format worksheet items:

1. Display the worksheet that you want to edit (for more information, see "[How to open a Discoverer worksheet](#)").
2. Select one or more worksheet items or cells by selecting the grab handle of worksheet items to highlight them.

**Hint:** You can select more than one item by pressing Ctrl and selecting another item.

3. Select the **Format** link to display formatting tools above the worksheet data.
4. Use the formatting tools to format the selected worksheet items.

For example, you might:

- click the **B**, *i*, or **U** buttons to format the text as bold, italic, or underlined
- select the color palette icons next to the Background and Font tools to display a color palette
- select the **More** link to display the ["Format Cells page"](#), which enables you to specify font, border, and number format options for the selected worksheet items

**Note:** Number format options are only available for OLAP worksheets.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## Using conditional formatting in Discoverer

Conditional formatting is the use of conditional formats and stoplight formats to highlight worksheet values. This section explains how use conditional formatting in Discoverer Viewer, and contains the following topics:

- ["What is a conditional format?"](#)
- ["What is a stoplight format?"](#)
- ["How to activate and deactivate conditional formats"](#)
- ["How to create a conditional format"](#)
- ["How to create a stoplight format"](#)
- ["How to create a stoplight format"](#)
- ["How to create a conditional header format"](#)
- ["How to edit conditional formats"](#)
- ["How to delete conditional formats"](#)

### What is a conditional format?

A conditional format enables you to highlight worksheet values that meet a specific condition. For example, you might want to highlight profit values greater than 30,000.

**Note:** In Discoverer Desktop, conditional formats are known as exceptions.

In the example below, a conditional format highlights Profit SUM values greater than 30,000. The Profit SUM figures for Cincinnati and Louisville are displayed with a blue background because they are greater than 30,000.

**Figure 3–1** A Discoverer worksheet using a conditional format

	Region	City	Profit SUM
1	Central	Chicago	\$7,948
2		Cincinnati	\$31,112
3		Dallas	\$8,733
4		Louisville	\$31,883
5		Minneapolis	\$8,550
6		Nashville	\$8,639
7		St. Louis	\$19,310
8			Total for Central: \$116,174

## What is a stoplight format?

A stoplight format (or traffic light format) enables you to categorize numeric worksheet values as unacceptable, acceptable, and desirable using different colors. The default stoplight format uses the familiar red, yellow, and green color scheme to represent unacceptable, acceptable, and desirable values.

For example, you might want to categorize performance based on profit values where:

- values less than or equal to 10,000 are unacceptable, and are shown in red
- values between 10,001 and 29,999 are acceptable, and are shown in yellow
- values equal to or greater than 30,000 are desirable, and are shown in green

In the example below, a stoplight format based on the above values is used to categorize Profit SUM values. Values in the unacceptable category are shown in red (e.g. Chicago and Dallas). Values in the acceptable category are shown in yellow (e.g. St. Louis and Washington). Values in the desirable category are shown in green (e.g. Cincinnati and Louisville).

**Figure 3–2 A Discoverer worksheet using a stoplight format**

	Region	City	Profit SUM
1	Central	Chicago	\$7,948
2		Cincinnati	\$31,112
3		Dallas	\$8,733
4		Louisville	\$31,883
5		Minneapolis	\$8,550
6		Nashville	\$8,639
7		St. Louis	\$19,310
8	East	Washington	\$23,304
9		Pittsburgh	\$16,465
10		Philadelphia	\$22,657
11		New York	\$76,064
12		New Orleans	\$10,953
13		Miami	\$6,300

## What is a conditional header format?

A conditional header format enables you to change the appearance of selected worksheet item headings. For example, you might want to display the heading for items Year and Region with a blue background, leaving the items Profit SUM with the default white background.

## How to activate and deactivate conditional formats

You activate a conditional format to apply that format to the currently displayed worksheet. For example, you might want to use an existing conditional format to highlight percentage values greater than 75% by displaying them with a blue background.

You deactivate a conditional format to remove that format from the currently displayed worksheet. For example, you might want to remove a conditional format that highlights percentage values greater than 75% by displaying them with a blue background. You can always activate the conditional format later.

For more information, see ["What is a conditional format?"](#).

To activate and deactivate a conditional format:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Format** link to display formatting tools above the worksheet data.
3. Select the **Conditional Formats** link to display the ["Conditional Formats \(Table/Crosstab\) page"](#).
4. To activate a conditional format, select the check box in the **Display** column next to the format you want to activate.
5. To deactivate a conditional format, clear the check box in the **Display** column next to the format you want to deactivate.
6. Click Apply to save the changes and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to change the precedence of conditional format

When two formats specify different settings for the same cell, the most recently created format takes precedence. For example, when you set the background color for a column to blue, and then set the background color for a row to red, the intersecting cell has a red background.

The order of the formats in the Conditional Formats <Crosstab | Table> page determines which format applies in the case of a conflict. The higher format in the list takes precedence over lower formats.

For more information, see ["What is a conditional format?"](#).

To change the precedence of a conditional format:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Format** link to display formatting tools above the worksheet data.
3. Select the **Conditional Formats** link to display the ["Conditional Formats \(Table/Crosstab\) page"](#).
4. Click the Move Up icon next to the conditional format that you want to apply.
5. Click Apply to save the changes and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to create a conditional format

You create a conditional format to highlight worksheet values that meet a specific condition. For example, you might want to highlight percentage values greater than 75% by displaying them with a blue background.

For more information, see ["What is a conditional format?"](#).

**Note:** To categorize worksheet values as unacceptable, acceptable, and desirable using color and text formatting, you create a spotlight format and not a conditional format (for more information, see ["How to create a spotlight format"](#)).

To create a conditional format?

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Format** link to display formatting tools above the worksheet data.
3. Select the **Create Conditional Format** link to display the ["Create Conditional Cell Format page"](#).
4. Use the ["Create Conditional Cell Format page"](#) to select the worksheet item that you want to format, and specify format colors and styles.
5. Click Apply to save the changes and display the worksheet.  
Discoverer applies the format changes you have specified.  
**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to create a spotlight format

You create a spotlight format when you want to categorize numeric worksheet values as unacceptable, acceptable, and desirable using text and color formatting. For example, you might want to display low cost values in green, medium cost values in yellow, and high cost values in red.

For more information, see ["What is a spotlight format?"](#).

To create a spotlight format?

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Spotlight** link to display spotlight formatting tools above the worksheet data.
3. Use the **Format** drop down list to specify whether to apply the format to all cells, selected cells, or to cells for an item or measure.
4. Enter threshold values in the Unacceptable and Desirable fields.  
**Note:** Threshold values are inclusive. For example, if you select 30,000 in the Desirable field, you apply this category to value equal to or greater than 30,000.
5. (optional) Select the color palette icons next to the Unacceptable, Acceptable, and Desirable fields to display a color palette and change the color for that category.
6. Click Go to apply the spotlight format to the worksheet.  
Discoverer applies the format changes you have specified.  
**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to create a conditional header format

You create a conditional header format to change the look and feel of particular worksheet item headings. For example, you might want to change the background color of the worksheet item header for a Region item to blue.

For more information, see ["What is a conditional header format?"](#).

To create a conditional header format:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Format** link to display spotlight formatting tools above the worksheet data.

3. Select the Conditional Formats link to display the "[Conditional Formats \(Table/Crosstab\) page](#)".
4. Click Create Conditional Header Format to display the "[How to create a conditional header format](#)".
5. Use the "[Create Conditional Header Format page](#)" to select the worksheet item that you want to format, and specify format colors and styles.
6. Click Apply to save the changes and display the "[Conditional Formats \(Table/Crosstab\) page](#)".
7. Click Apply to close the "[Conditional Formats \(Table/Crosstab\) page](#)" and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to edit conditional formats

You edit a conditional format to change how it works. For example, you might want to change the color of the Acceptable spotlight category from yellow to orange.

To edit a conditional format:

1. Display the worksheet that you want to analyze (for more information, see "[How to open a Discoverer worksheet](#)").
2. Select the **Format** link to display formatting tools above the worksheet data.
3. Select the **Conditional Formats** link to display the "[Conditional Formats \(Table/Crosstab\) page](#)".
4. Select the pencil icon in the Edit column next to the format you want to change to display the edit page for that type of format.
5. Make the necessary changes to the formats.
6. Click Apply to save the changes and close the edit page.
7. Click Apply to close the "[Conditional Formats \(Table/Crosstab\) page](#)" and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## How to delete conditional formats

You delete a conditional format to remove it permanently from the currently displayed worksheet. For example, you might want to delete a conditional format that highlights percentage values greater than 75% by displaying them with a blue background.

**Hint:** If you think you might want to use the conditional format again, consider deactivating the conditional format rather than deleting it (for more information, see "[How to activate and deactivate conditional formats](#)").

To delete a conditional format:

1. Display the worksheet that you want to analyze (for more information, see "[How to open a Discoverer worksheet](#)").
2. Select the **Format** link to display formatting tools above the worksheet data.

3. Select the **Conditional Formats** link to display the "[Conditional Formats \(Table/Crosstab\) page](#)".
4. Select the trash can icon in the Delete column next to the conditional format you want to delete.

**Hint:** To remove all formatting applied using the Formatting toolbar from the current worksheet, click Clear All Formatting, and click Yes at the confirmation page.

5. Click Apply to save the changes and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the formatting tools.

## Using graphs in Discoverer Viewer

The following topics explain how to use graphs in Discoverer Viewer:

- ["About using graphs"](#)
- ["How to edit a graph"](#)
- ["How to display or hide a graph"](#)

### About using graphs

You can edit a graph in Discoverer Viewer by:

- changing the graph type
- changing the graph size
- enabling and disabling graph gradients
- enabling and disabling 3D effects
- changing the data area that is plotted on the graph

For more information about editing graphs, see ["How to edit a graph"](#).

#### Notes

- Graphs created in Discoverer Plus (Relational and OLAP) are displayed in Discoverer Viewer. Graphs created in Discoverer Desktop are not displayed in Discoverer Viewer.

### How to edit a graph

You edit a graph to change the style or appearance of the graph. For example, you might want to change the graph type from pie graph to bar graph.

To edit a graph:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).

If the worksheet contains a graph that is hidden, display the graph (for more information, see ["How to display or hide a graph"](#)).

2. Select the **Graph** link to display graph tools above the graph.
3. Use the graph tools to edit the graph as follows:
  - to change the graph type, select a graph type from the **Type** drop down list



- to change the graph style, select a graph style from the drop down list next to the **Type** drop down list
  - to change the graph size, change the values in the **Height** and **Width** fields
  - to specify whether the 3D or gradient effect is applied, use the **3D Effect** and **Gradient** check boxes.
4. Click Apply to close the ["Conditional Formats \(Table/Crosstab\) page"](#) and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** Select the minus (-) icon next to the **Tools** label to hide the graph tools.

## How to display or hide a graph

You display a graph to plot the currently displayed worksheet data in a graph. For example, you might want to plot the worksheet data in a pie chart.

You hide a graph to remove it from the worksheet.

To display or hide a graph:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Worksheet options** link to display the ["Worksheet Options page"](#).
3. To display the graph for the current worksheet, select the **Graph** check box.
4. To hide the graph for the current worksheet, clear the **Graph** check box.
5. Click Apply to close the ["Worksheet Options page"](#) and display the worksheet.

Discoverer applies the format changes you have specified.

**Hint:** You can also use the Graph plus (+) and minus (-) icons to expand and collapse the graph.

## Using parameters in Discoverer Viewer

The following topics explain how to use parameters in Discoverer Viewer for worksheets containing relational data:

- ["About using indexes and values in parameters"](#)
- ["How to apply different parameter values to worksheets"](#)

**Note:** Discoverer worksheets containing OLAP data do not contain parameters.

## About using indexes and values in parameters

Discoverer enables end users to display and select parameter values with index numbers (e.g. (1) January, (2) February) or without index numbers (e.g. January, February). Indexes are set up by the Discoverer manager to improve query performance for specific End User Layer (EUL) items, when these items are used as parameters. For more information about selecting parameters, see ["Edit Parameters page"](#).

The **<Index and Value>** drop down list options enables you to choose whether you want to enter parameter values as index numbers or values. For example, if you want a parameter field called **Month** to be set to the value January, you could do either of the following:

- select Index from the <Index and Value> drop down list and enter the index number that represents January (e.g. 1)
- select Value from the <Index and Value> drop down list and enter the text value that represents January (e.g. January)

Either of the above values will produce the same result in the worksheet.

**Note:** Parameters do not apply with OLAP connections.

## How to apply different parameter values to worksheets

You apply a different parameter value to a worksheet to refine the worksheet data. For example, you might want to display data for a different month.

To apply a different parameter value to a worksheet:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).  
When you display a worksheet that contains active parameters, Discoverer prompts you to specify parameter values for each active parameter.
2. Select the Rerun Query link in the Actions area (or select Refresh in the browser) to display the ["Edit Parameters page"](#).
3. Use the ["Edit Parameters page"](#) to specify the new parameter values.  
For example, you might enter New York for a City parameter to display worksheet data for New York.
4. Click Apply to close the ["Edit Parameters page"](#) and display the worksheet.  
Discoverer applies the changes you have specified.

## About error when using lists of values

If you have a Discoverer worksheet portlet with parameters that use lists of values (LOVs), then you will get a "404 Not Found" error in the following situations:

- When you click "Analyze" in a Discoverer Portlet, to launch OracleBI Discoverer Viewer.

## How to sort items and measures in a worksheet

You can change the order in which items and measures are displayed by using the Sort tool.

**Note:** Sort tools are not available for crosstab worksheets based on relational data. Crosstab worksheets based on relational data are sorted by the worksheet creator in either Discoverer Plus or Discoverer Desktop.

To sort items and measures in a worksheet:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the **Sort** link to display the sort tools above the worksheet data.
3. The available sort tools depend on the type of data source, as follows:
  - on a table worksheet containing relational data, use the **Sort** and **Order** fields to select sort options, or select the **More** link to display the ["Multiple Sort page"](#), which enables you to do more complex sorting




- on a worksheet containing multidimensional data, use the **Sort**, **Based On**, and **Order** fields to select sort options

Discoverer sorts the worksheet data according to the sort options you have specified.

## About drilling in Discoverer Viewer

Discoverer enables you to navigate worksheet data quickly and easily using a powerful set of drilling tools.

The table below lists the types of drill supported by Discoverer:

Drill type	Description	Drill icon used in worksheets
Drill up and down	Drill up and down a drill hierarchy created by the Discoverer manager.  You can drill up and down in both worksheet data and graph data.	
Drill to a related item	Drill to a related worksheet item.  You can drill to a related item in worksheet data, but not graph data.	
Drill out	Drill out to a worksheet, Internet URL, or file.  You can drill out in worksheet data, but not graph data.	

## How to drill down in worksheets

You drill to navigate worksheet data quickly and easily. For example, you might drill down into a worksheet item to see data in more detail.

To drill down in a worksheet:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. The available drill tools depend on the type of data source, as follows:
  - on a worksheet containing relational data, you:
    - Select a drill icon next to the item heading of the worksheet item you want to drill down into.
    - Select a level of detail below the current level of detail (indicated by a dot).  
For example, to drill down from Region to City, select the City option.  
Discoverer updates the worksheet according to the drill level you selected. For example, if you drill down from Region to City, Discoverer adds city data to the worksheet.
  - on a worksheet containing multidimensional data, you:
    - Select a Drill Expand (+) icon next to the worksheet value you want to drill down into.

Discoverer displays the next level of data in the data hierarchy. For example, if you drill into the 2005 value, you might display quarterly data for 2005.

Discoverer updates the worksheet according to the drilling options you have specified.

**Note:** For information about drilling in graphs, refer to the Discoverer Plus Help systems.

## How to drill up in worksheets

You drill to navigate worksheet data quickly and easily. For example, you might drill up from a worksheet item to consolidated data.

To drill up in a worksheet:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. The available drill tools depend on the type of data source, as follows:

- on a worksheet containing relational data, you:
  - Select a drill icon next to the item heading of the worksheet item you want to drill up to.
  - Select a level of detail above the current level of detail (indicated by a dot).

For example, to drill up from City to Region, select the Region option.

Discoverer updates the worksheet according to the drill level you selected. For example, if you drill up from City to Region, Discoverer removes City data from the worksheet.

- on a worksheet containing multidimensional data, you:
  - Select a Drill Collapse icon (-) next to the worksheet value you want to drill up from.

Discoverer collapses the worksheet value. For example, if you collapse the 2005 value, you remove quarterly data for 2005.

Discoverer updates the worksheet according to the drilling options you have specified.

**Note:** For information about drilling in graphs, refer to the Discoverer Plus Help systems.

## How to change the layout of a worksheet

You can change the layout of a worksheet by using the Layout tool. For example, you might want to analyze a worksheet in a new way by moving a worksheet item called Year from the left axis to the top axis.

To change the layout of a worksheet:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the Layout link to display layout tools above the worksheet.

To do more complex layout changes, select the **More** link to display the ["Worksheet Display page: \(Table/Crosstab tools\)"](#).

3. Use the layout tools or options on the ["Worksheet Display page: \(Table/Crosstab tools\)"](#) to change the worksheet layout.

Discoverer updates the worksheet according to the layout options you have specified.

## How to apply saved selections

A saved selection is a predefined selection of members for a dimension. It can be specified as members themselves, or as criteria for selecting members (e.g. last three months, top 10 cities based on shoe sales). You can apply saved selections to worksheets containing data from multidimensional (OLAP) data sources.

To apply a saved selection:

1. Display the worksheet that you want to analyze (for more information, see ["How to open a Discoverer worksheet"](#)).
2. Select the Saved Selections link to display the saved selection tools above the worksheet.

Discoverer updates the worksheet according to drilling options you specified.

3. Use the Dimension drop down list to select dimension whose members you want to update.
4. Use the Action drop down list to specify whether to replace the current set of dimension members with those in the saved selection, whether to add the members from the saved selection to the current members, whether to remove the members in the saved selection from the current selection, or whether to keep only the dimension members in the current selection that are also in the saved selection.
5. Use the Saved Selection list to specify the saved selection to apply.
6. Click Go to apply the saved selection.

Discoverer updates the worksheet according to saved selections you have applied.



# Part II

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## Reference information

This section contains general reference information including descriptions of all Oracle Business Intelligence Discoverer Viewer pages.





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## Dialog reference

This chapter contains comprehensive reference information for each page in Discoverer Viewer.

"About Viewer page"  
"Choose attachment type (send as email attachment)"  
"Choose export type page"  
"Component Disabled page"  
"Conditional Formats (Table/Crosstab) page"  
"Create Conditional Cell Format page"  
"Create Conditional Header Format page"  
"Create Stoplight Format page"  
"Drill page"  
"Edit Parameters page"  
"Error page"  
"Export Ready page"  
"Format Cells page"  
"Format Worksheet data links page"  
"Logged Out page"  
"Multiple Sort page"  
"PDF Ready page"  
"PDF Sample Ready page"  
"Preferences page"  
"Printable Page Options page: Content tab"  
"Printable Page Options page: Page Setup tab"  
"Query Cancelled page"  
"Query Confirmation needed page"  
"Query Progress page"  
"Save Warning page"  
"Save Workbook As page"

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"Search and Select page"

"Send Email page"

"Table / Crosstab Layout page"

"Worksheet Display page"

"Worksheet Display page: (Actions and Worksheet links)"

"Worksheet Display page: (Graph tools)"

"Worksheet Display page: (Page level tools and controls)"

"Worksheet Display page: (Table/Crosstab tools)"

"Worksheet List page"

"Worksheet Options page"

## About Viewer page

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This page gives a brief overview of OracleBI Discoverer Viewer and displays the component version numbers of Discoverer Viewer, the PDF generator, and the Discoverer Server. You might use the component version numbers to determine the versions being used if any upgrades or patches are made following release.

### Component Versions

#### Viewer

This field displays the version number of Discoverer Viewer.

#### PDF

This field displays the version number of the PDF generator that is used to generate PDFs through Discoverer Viewer (using the Printable page option).

#### Server

This field displays the version number of the OracleBI Discoverer Server.

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## Choose attachment type (send as email attachment)

Use this page to select an export file format that you want to use when you export a worksheet into a specified format to send as an email attachment. When a worksheet is received as an email attachment, it can be opened in other applications.

For more information, see:

- ["How to send Discoverer worksheets in an email"](#)

### Choose export type

Use the drop down list to select the export format into which you want to export the worksheet.

**Note:** For additional information about exporting worksheets to different formats, see ["What are the implications of using different export formats?"](#).

For more information about how the behavior of exported worksheets depends on how helper applications (e.g. MS Word, Excel) are specified in your operating system, see ["Choose export type page"](#).

### Next

Use the **Next** button to export the worksheet to the specified format and display the ["Send Email page"](#).

## Choose export type page

Use this page to select the export format that you want to use when you export a worksheet into a specified file format to open in other applications.

You can export the current worksheet in a variety of formats. The worksheet is exported exactly as it is displayed prior to export. In other words, all the drills, page items and query parameters that are defined in the worksheet are exported.

For more information, see:

["How to configure a client machine to automatically open exported Excel files"](#)

### Choose export type

Use the drop down list to select the export format into which you want to export the worksheet.

**Note:** For additional information about exporting worksheets to different formats, see ["What are the implications of using different export formats?"](#).

**Note:** If you select the html export format, Discoverer automatically creates a Zip file containing the HTML file to be exported. Some SMTP servers might be configured to prevent users from sending email messages that contain Zip file attachments.

### Export

Use the Export button to export the worksheet into the specified format and display the ["Export Ready page"](#).

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## Component Disabled page

This page displays error messages that indicate whether the Discoverer Viewer component has been disabled, or whether Discoverer Viewer has not been started or has been stopped.

## Conditional Formats (Table/Crosstab) page

Use this page to manage the conditional formats and stoplight formats that you apply to a worksheet. For example, you might want to activate a conditional format that highlights costs that are greater than 100,000.

For more information, see:

["Format Worksheet data links page"](#)

["Create Conditional Cell Format page"](#)

["Create Conditional Header Format page"](#)

["Create Stoplight Format page"](#)

### <Conditional formats>

Use these lists to create, manage and edit conditional and stoplight formats.

**Hint:** Use the check box in the **Display** column to activate and deactivate a format.

**Note:** You can have conditional formats and stoplight formats active on the same worksheet item at the same time.

### Hide data values for Stoplight Formats

Use this check box to specify whether to display worksheet values for the worksheet item that is being formatted. For example, you might select this check box if you want to create a worksheet that displays formatting colors but not the values themselves.

### Create Stoplight Format

Use this button to display the ["Create Stoplight Format page"](#), which enables you to create a new stoplight format to categorize worksheet numeric values into acceptable, desirable, and unacceptable categories.

### Create Conditional Cell Format

Use this button to display the ["Create Conditional Cell Format page"](#), which enables you to create a new conditional format to highlight worksheet numeric values.

### Create Conditional Header Format

Use this button to display the ["Create Conditional Header Format page"](#), which enables you to create a new conditional format to highlight worksheet header values.

### Display

Use these check boxes to display the conditional format in the current worksheet.

**Note:** If more than one **Display** check box is selected (e.g. when there are multiple stoplight formats and/or multiple conditional cell formats):

- Discoverer Viewer first applies the stoplight formats first in the order in which they are listed.
- Discoverer Viewer then applies conditional formats that don't conflict with the stoplight formats.
- Where a conflict exists between conditional formats and stoplight formats, Discoverer Viewer applies the stoplight formats.

- You can change the order in which the formats are applied by using the icons in the Move Up and Move Down columns.

**Name**

This read-only field displays the name of the conditional format.

**Attributes**

This read-only field shows what the format looks like.

**Move Up**

Use the move up icon in this column to move a conditional format up in the list of conditional formats. One click moves a conditional format up one row at a time. Clicking the icon in the Move Up column enables you to change the order in which the spotlight formats or other conditional formats are applied.

**Move Down**

Use the move down icon in this column to move a conditional format down in the list of conditional formats. One click moves a conditional format down one row at a time. Clicking the icon in the Move Down column enables you to change the order in which the spotlight formats or other conditional formats are applied.

**Edit**

Use this icon to display either the ["Create Conditional Cell Format page"](#), the ["Create Spotlight Format page"](#), or the ["Create Conditional Header Format page"](#). these pages enable you to edit the format that is selected in the <Conditional formats list>.

**Delete**

Use this icon to delete the selected conditional format.

**Clear All Formatting**

Use this button to deselect all of the **Display** check boxes and to remove all formatting entries that were defined using the Toolbar (for more information, see ["Worksheet Display page: \(Table/Crosstab tools\)"](#)).

**Notes**

- If you save a workbook in Discoverer Viewer, Discoverer Viewer does not save any conditional or spotlight formatting information for future use.



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## Create Conditional Cell Format page

Use this page to create a conditional cell format that will display worksheet data cells in a specified format, depending on a condition that you define on this page.

For example, to format the background of worksheet data cells in blue if the item Profit SUM is greater than \$10,000, you might:

- Select Profit Sum from the **Item** field.
- Select Greater Than (>) from the **Operator** drop down list.
- Enter 10,000 in the **Value** field.
- Select a blue color from the **Background** color picker.

This page is also displayed as:

Edit Conditional Cell Format page

For more information about other conditional formatting options, see:

["Format Worksheet data links page"](#)

["Conditional Formats \(Table/Crosstab\) page"](#)

["Create Conditional Header Format page"](#)

["Create Stoplight Format page"](#)

### Name

Use this field to enter a name for the conditional cell format. Discoverer Viewer generates a default name, which you can edit.

### Item

Use this drop down list to select the item or measure to which you want to apply a conditional format. You must select a numeric item (e.g. Profit).

### Operator

Use this drop down list to select the operator (e.g. >, <, =) that will act on the value specified in the **Value** field for the selected item or measure.

### Value

Use this field to enter a value to apply to the selected item or measure. The value you enter in this field is applied to the selected item or measure, and is subject to the operator that you select. You must enter a number in this field.

### Dimension

Use this read-only field to view the dimensions (e.g. Year, Region, City) to which you can apply the conditional format.

**Note:** This field is only displayed for crosstab worksheets.

### Apply Format to Members

Use this read-only field to view the selected dimension members (e.g. 2002, East, Boston) to which the format will apply.

**Note:** This field is only displayed for crosstab worksheets.

### **Edit**

Use this icon to display the Select <member> page where you select one or more dimension members that you want the conditional format to apply to. For example, if the member is City, you could select a specific city (e.g. Paris) to apply the conditional format to that city when the condition becomes true.

**Note:** This field is only displayed for crosstab worksheets.

**Note:** Instead of displaying a table of dimensions whose selections you can edit, Discoverer might display a message saying that the selections cannot be changed. Discoverer displays this message under the following circumstances:

- When you have selected more than one range of cells.  
In this case, the selection is too complex to be identified by the dimension members for the cells.
- When the crosstab is in outline mode, where a member at a higher level of a hierarchy has its own row, apart from any of its children, and you have selected one of these rows.  
For example, when a crosstab displays rows for countries and their cities. In outline mode, Japan would have its own row, and rows for Osaka and Tokyo would appear below it. When you apply a format to the Japan row, the selection is too complex to be represented by its dimension members, because there is no value for cities.
- When the selected cells do not currently appear in the crosstab.  
For example, if a row or column for Osaka has been selected, and then you drill up so that the crosstab no longer displays cities in Japan, then the selected cells do not appear in the crosstab, and the selection cannot be edited in this page. If you drill down again in Japan, then you can edit the selection in this page

### **Bold**

Use this drop down list to select whether to apply or remove the bold format from the conditional cell format.

### **Italic**

Use this drop down list to select whether to apply or remove the italic format from the conditional cell format.

### **Underline**

Use this drop down list to select whether to apply or remove the underline format from the conditional cell format.

### **Background**

Use the color picker to select a background color to apply to the conditional cell format.

### **Font**

Use the color picker to select a font color to apply to the conditional cell format.

**Border**

Use this area to select border line styles and border line color formatting for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Style**

Use this drop down list to select a border line style for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Line color**

Use this icon to display a color palette where you select a border line color to use for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Outline, Bottom, Top, Left, Right**

Use these rows to set the border specifications to use for all the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Number**

This area displays different content for different number categories.

**Categories**

Use this field to select a category, and then Discoverer Viewer displays the appropriate controls. Depending on which category you select, the following controls can be displayed:

**Note:** This field is only displayed when you use an OLAP connection:

- **Negative Numbers**

Use this drop down list to specify a format for negative numbers. This drop down list is displayed for Number and Currency categories.

- **Decimal Places**

Use this drop down list to specify the desired number of decimal places. This drop down list is displayed for Number, Currency, and Percent categories.

- **Scale**

Use this drop down list to specify whether to abbreviate numbers. For example, when Thousands is specified in this drop down list, the value 10000 is displayed as 10. This drop down list is displayed for Number and Currency categories.

- **Currency Symbol**

Use this drop down list to select the currency symbol for cells. Setting this option does not convert one currency to another. Therefore be careful to apply the appropriate currency symbol. This field is displayed only for the Currency category.

- **Show <letter> for <Scale>**

Select this check box to identify number abbreviations to use in worksheet cells. For example, Thousands is specified in the **Scale** drop down list, this check box is

labeled **Show 'K' for Thousands** If you select this check box and apply the settings, the value 10000 is displayed in Discoverer Viewer as 10K. This check box is displayed for Number and Currency categories, when **Scale** is set to a value other than None.

- **Use 1000 Separator**

Use this check box to display a comma after the number of thousands. For example, if the **Scale** is set to None and you select this check box, then the value 10000 is displayed as 10,000. This check box is displayed only for the Number category and is locale (or language) dependent.

- **Insert**

Use this drop down list to create a custom format, and then choose Go to add the item to the **Edit Custom Format** field. This drop down list is displayed only for the Custom category.

- **Edit Custom Format**

If you are familiar with Oracle number formatting, you can enter an Oracle number format in this field. Alternatively, you can use format specifications by using the **Insert** drop down list. This field is displayed for the Custom category.

**Note:** Only one category can be applied to a number format at a time. Only the settings in the selected category are applied.

## **Date**

This area displays different contents for different date categories.

### **Categories**

Use this field to select a category, and then Discoverer Viewer displays the appropriate controls. Depending on which Category you select, the following controls can be displayed:

**Note:** This field is only displayed when you use an OLAP connection:

- **Date Options**

Use this list to select a format for dates. This list is displayed for the Date category.

- **Time Options**

Use this list to specify a format for time values. This list is displayed for the Time category.

- **Date Time Options**

Use this list to specify a format for date and time values. This list is displayed for the Date & Time category

- **Insert**

Use this list to create a custom format, and then choose Go to add the item to the **Edit Custom Format** field. This field is displayed for the Custom category.

- **Edit Custom Format**

If you are familiar with Oracle date formatting, you can enter an Oracle date format in this field. Alternatively, you can use format specifications by using the **Insert** drop down list. This field is displayed for the Custom category.

**Note:** Only one category can be applied to a date format at a time. Only the settings in the selected category are applied.

**Notes**

- This page uses standard keyboard navigation. If you are not using a mouse, you cannot use the color grids to select a color. Instead, enter RGB values (e.g. #330033 for the color black)

## Create Conditional Header Format page

Use this page to create a conditional header format that will display a header cell in a specified format depending on a condition that you define on this page.

For example, to format the header cell text of the Year column in blue if the Year is 2000, you might:

- Select Year from the **Dimension** drop down list.
- Select the **Selected Calendar Year** check box.
- Move 2000 from the **Available** field to the **Selected** field.
- Select a blue color from the **Font** color picker.

This page is also displayed as:

Edit Header Format page

For more information about other conditional formatting options, see:

["Create Conditional Cell Format page"](#)

["Create Stoplight Format page"](#)

### Name

Use this field to enter a name for the conditional header cell format. Discoverer Viewer generates a default name, which you can edit.

### Dimension

Use this drop down list to select the dimension (e.g. Year, Region, City) to which you apply the conditional format.

**Note:** This field is only displayed with crosstab worksheets.

### Apply format to

Use these radio buttons to specify the header values to apply the conditional header format to as follows:

- **Entire <Table/Crosstab> or Any <Dimension>**  
Use this radio button to apply the current format to any value. For example, if the selected dimension was Region, the current format would be applied to the header in any region in the worksheet (e.g. East, West, or Central).
- **Selected <Columns> or Selected <Dimensions>**  
Use this radio button to apply the current format to one or more available values. For example, if the selected dimension is Region, the values for Region might be East, West, and Central.

Use this drop down list to select an item or measure to apply a conditional format to.

### Available/Selected

The **Available** field shows the members in the worksheet. The **Selected** field shows those members to which the conditional format will apply.

Use these fields to move the members to and from the **Available** and **Selected** fields.

**Bold**

Use this drop down list to select whether to apply or remove the bold format from the conditional header format.

**Italic**

Use this drop down list to select whether to apply or remove the italic format from the conditional header format.

**Underline**

Use this drop down list to select whether to apply or remove the underline format from the conditional header format.

**Background**

Use the color picker to select a background color to apply to the conditional header format.

**Font**

Use the color picker to select a font color to apply to the conditional header format.

**Border**

Use this area to select border line styles and border line color formatting for the selected header cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Style**

Use this drop down list to select a border line style for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Line color**

Use this icon to display a color palette where you select a border line color to use for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Outline, Bottom, Top, Left, Right**

Use these rows to set the border specifications to use for all the selected header cells.

**Note:** This field is only displayed when you use an OLAP connection:

**Notes**

- This page uses standard keyboard navigation. If you are not using a mouse, you cannot use the color grids to select a color. Instead, enter RGB values (e.g. #330033 for the color black)

## Create Stoplight Format page

Use this page to create a new stoplight format for a worksheet item. For example, you might want to categorize sales figures as unacceptable, acceptable, and desirable.

This dialog is also displayed as:

Edit Stoplight format page

For more information, see:

["What is a conditional format?"](#)

["What is a stoplight format?"](#)

["Format Worksheet data links page"](#)

["Conditional Formats \(Table/Crosstab\) page"](#)

["Create Conditional Header Format page"](#)

["Create Stoplight Format page"](#)

### Name

Use this field to specify a name for the stoplight format. The name you specify is used to identify the conditional format on other pages. If you want to use the name that Discoverer Viewer has created, you use the value already in the field.

### Thresholds

Use these fields to specify the ranges for the unacceptable and desirable categories.

#### ■ Unacceptable

Use this field to enter the threshold for the unacceptable category. For example, enter 5000 to treat values of 5000 or less as unacceptable.

#### ■ Acceptable

This read-only field is populated automatically based on the values that you enter in the **Unacceptable** and **Desirable** fields.

#### ■ Desirable

Use this field to enter the threshold for the desirable category. For example, enter 30000 to treat values of 30000 or more as desirable.

### Color

Use these icons to display the color picker, which enables you to change the color of unacceptable, acceptable, and desirable values in all stoplight formats.

### Dimension

Use this read-only field to view the dimensions (e.g. Year, Region, City) to which you can apply the conditional format.

**Note:** This field is only displayed for crosstab worksheets.

### Apply Format to Members

Use this read-only field to view the selected dimension values (e.g. 2002, East, Boston) to which the format will apply.



**Note:** This field is only displayed for crosstab worksheets.

### Edit

Use this icon to display the Select <member> page where you select one or more dimension members that you want the conditional format to apply to. For example, if the member is City, you could select a specific city (e.g. Paris) to apply the conditional format to that city when the condition becomes true.

**Note:** This field is only displayed for crosstab worksheets.

**Note:** Instead of displaying a table of dimensions whose selections you can edit, Discoverer might display a message saying that the selections cannot be changed. Discoverer displays this message under the following circumstances:

- When you have selected more than one range of cells.  
In this case, the selection is too complex to be identified by the dimension members for the cells.
- When the crosstab is in outline mode, where a member at a higher level of a hierarchy has its own row, apart from any of its children, and you have selected one of these rows.  
For example, when a crosstab displays rows for countries and their cities. In outline mode, Japan would have its own row, and rows for Osaka and Tokyo would appear below it. When you apply a format to the Japan row, the selection is too complex to be represented by its dimension members, because there is no value for cities.
- When the selected cells do not currently appear in the crosstab.  
For example, if a row or column for Osaka has been selected, and then you drill up so that the crosstab no longer displays cities in Japan, then the selected cells do not appear in the crosstab, and the selection cannot be edited in this page. If you drill down again in Japan, then you can edit the selection in this page

### Apply format to

Use these radio buttons to specify the data points to apply the stoplight format to as follows:

- **All Data Points**  
Use this radio button to apply the current stoplight format to all Data Point values.
- **Selected Data Points**  
Use this radio button to apply the current format to one or more available Data Points. For example, if the selected data point is Profit Sum, the current format would be applied to all cells in the Profit Sum column.

**Note:** This field is only displayed for table worksheets.

### Available/Selected

The **Available** field shows the Data Points in the worksheet. The **Selected** field shows those Data Points to which the stoplight format will apply.

Use these fields to move the Data Points to and from the **Available** and **Selected** fields.

**Note:** This field is only displayed for table worksheets.

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## Drill page

This page displays the information to enable you to perform a drill by specifying the drill details and applying the drill to the current worksheet.

**Note:** This page is not displayed when using an OLAP connection.

**Hint:** To display this page you use the Tab key to highlight a worksheet cell heading that has an arrow icon (i.e. a drill icon) then use the Return button.

For more information, see "[Worksheet Display page: \(Page level tools and controls\)](#)".

### **From**

This read-only area displays the name of the item being drilled from (e.g. Product Type).

### **To**

This area displays fields that enable you to select the Type of drill, the hierarchy and the item you want to drill to.

### **Type**

Use this drop down list to select the Type of drill that you want to use (e.g. Up/Down, Related Item).

### **Hierarchy**

Use this drop down list to select the hierarchy that is being drilled into.

### **Apply**

Use this drop down list to apply the drill details specified on this page and display the result of the drill in the worksheet.

## Edit Parameters page

Use this page to specify parameter values. Parameter values are typically used to:

- provide input to conditions that are used to filter worksheets (e.g. when prompted to choose a month, you might enter January to analyze January data only)
- provide input to calculations (e.g. when prompted to choose a rolling average value, you might enter the number 3 to calculate a three month rolling average)

### Parameters Needed

This area contains one or more fields into which you enter parameter values. Each field has a prompt (typically an instruction or question) telling you what value to enter. For example, if the prompt is 'Please choose a month', enter 'January' to analyze performance figures for January.

**Note:** Parameters that are required are shown with an asterisk.

To select parameters to apply to the current worksheet, you:

- use the Go button to display the worksheet using the default parameter values currently displayed
- use the flashlight icon to display the ["Search and Select page"](#) where you can search for and select parameter values from a list of values (LOV)
- enter a value into a text field and click the Go button

Discoverer Viewer might display an <Index and Value> drop down list for a parameter (for more information, see ["About using indexes and values in parameters"](#)).

**Note:** You specify in Discoverer Plus whether or not the <Index and Value> drop down list is displayed here (for more information, see the *Oracle Business Intelligence Discoverer Plus User's Guide*).

### Go

Click this button to display the worksheet.

### Notes

- You can enter the following reserved words into a parameter field:
  - SYSDATE or TODAY
 

Enter the reserved word SYSDATE or TODAY into a parameter field (must be of data type DATE) to display worksheet data that matches the system or today's date.
  - USER
 

Enter the reserved word USER into a parameter field (must be of the same data type as the data type of the parameter) to display worksheet data that matches the current database user.
  - NULL
 

Enter the reserved word NULL into a parameter field (must be of data type DATE, STRING or NUMERIC) to display worksheet data where the item that this parameter is based upon has a NULL value.

Note that the reserved word must have the same data type as the parameter (e.g. SYSDATE or TODAY can only be used with a parameter that has the data type DATE).

**Note:** You can enter reserved words using upper or lower case letters. However, you must not enter any additional text or text symbols. For example, you cannot use NULL% or 'NULL'. Discoverer would treat NULL% as a text string and not as a reserved word.

- If a Discoverer List Of Worksheets portlet includes a worksheet that has parameters with lists of values (LOV) (where a default value is not specified for each parameter), Discoverer displays a "404 Not Found" error when you do the following:
  1. Select the List Of Worksheets portlet link to display the worksheet in Discoverer Viewer.
  2. Click on the flashlight icon to display the ["Search and Select page"](#) to display the parameter values from a LOV.

To resolve this issue after launching Discoverer Viewer, run the worksheet again by pressing the Go button (you might need to enter some parameter values before pressing Go), then use the flashlight icon to display the ["Search and Select page"](#) to search for, and select parameter values from a LOV.

**Note:** This issue does not arise when a default value is specified for each parameter.

## Error page

This page displays text that describes the error encountered and enables you to reconnect to Discoverer using the Connect button.

### Error Encountered

#### Connect

Use this button to reconnect to Discoverer.

**Hint:** You might be able to use the Back button of the Browser to display the previous page that caused Discoverer to display this error page. However, this might not resolve the problem and if not, you should use the Connect button on this page to connect to Discoverer again.

## Export Ready page

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This page enables you to display and save the exported document in the format that you chose in the ["Choose export type page"](#).

### **Click to view or save**

Use this button to open the exported document in the appropriate helper application. For example, if you export a worksheet in PDF format, if you click this button Discoverer will display the exported document using Adobe Acrobat. You can then use Adobe Acrobat to view or save the exported worksheet.

The behavior that occurs after you click the Click to view or save button depends on the helper applications (e.g. Adobe Acrobat, MS Word, Excel) that are specified in your operating system for different file types (i.e. MIME Type settings).

Any of the following behaviors might occur after you click the Click to view or save button:

- the worksheet opens in an application embedded in the browser
- the worksheet opens in an application
- the operating system displays a dialog where you can save the worksheet in the exported format

**Note:** Before you can open worksheets in Discoverer Viewer, you must have made the recommended configuration settings to your operating system, browser (e.g. Internet Explorer) and spreadsheet application (e.g. Microsoft Excel). For more information, see ["How to configure a client machine to automatically open exported Excel files"](#).

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## Format Cells page

Use this page to specify font, border, and number format options for selected cells in a crosstab worksheet.

For more information about worksheet formatting, see:

["Worksheet Display page: \(Table/Crosstab tools\)"](#)

["What is a conditional format?"](#)

["What is a spotlight format?"](#)

### **Bold**

Use this drop down list to select whether to apply or remove the bold format from the selected worksheet cells.

### **Italic**

Use this drop down list to select whether to apply or remove the italic format from the selected worksheet cells.

### **Underline**

Use this drop down list to select whether to apply or remove the underline format from the selected worksheet cells.

### **Background**

Use the color picker to select a background color to apply to the selected worksheet cells.

### **Font**

Use the color picker to select a font color to apply to the selected worksheet cells.

### **Border**

Use this area to select border line styles and border line color formatting for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

### **Style**

Use this drop down list to select a border line style for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

### **Line color**

Use this icon to display a color palette where you select a border line color to use for the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

### **Outline, Bottom, top, Left, Right**

Use these rows to set the border specifications to use for all the selected worksheet cells.

**Note:** This field is only displayed when you use an OLAP connection:

## Number

This area displays different content for different number categories.

**Note:** This field is only displayed when you use an OLAP connection:

## Categories

Use this field to select a category, and then Discoverer Viewer displays the appropriate controls. Depending on which category you select, the following controls can be displayed:

**Note:** This field is only displayed when you use an OLAP connection:

- **Negative Numbers**

Use this drop down list to specify a format for negative numbers. This field is displayed for Number and Currency categories.

- **Decimal Places**

Use this drop down list to specify the example that has the desired number of decimal places. This field is displayed for Number, Currency, and Percent categories.

- **Scale**

Use this drop down list to specify whether to abbreviate numbers. For example, when Thousands is specified in this drop down list, the value 10000 is displayed as 10. This field is displayed for Number and Currency categories.

- **Currency Symbol**

Use this drop down list to select the currency symbol for cells. Setting this option does not convert one kind of currency to another. You should be careful to apply the appropriate currency symbol. This field is displayed only for the Currency category.

- **Show <letter> for <Scale>**

Select this check box to identify number abbreviations to use in worksheet cells. For example, when Thousands is specified in the **Scale** drop down list, this check box is labeled **Show 'K' for Thousands**. If the you select this check box and apply the settings, then the value 10000 is displayed in Discoverer Viewer as 10K. This field is displayed for Number and Currency categories, when Scale is set to a value other than None.

- **Use 1000 Separator**

Use this check box to display a comma after the number of thousands. For example, if the Scale is set to None and you select this check box, then the value 10000 is displayed as 10,000. This field is displayed only for the Number category, and is locale (or language) dependent.

- **Insert**

Use this drop down list to create a custom format, and then choose Go to add the item to the **Edit Custom Format** field. This field is displayed only for the Custom category.

- **Edit Custom Format**

If you are familiar with Oracle number formatting you can enter an Oracle number format in this field. Alternatively, you can use insert format specifications by using the **Insert** drop down list. This field is displayed for the Custom category.



**Note:** Only one category can be applied to a number format at a time. Only the settings in the selected category are applied.

## Date

This area displays different content for different date categories.

## Categories

Use this field to select a category, and then Discoverer Viewer displays the appropriate controls. Depending on which category you select, the following controls can be displayed:

**Note:** This field is only displayed when you use an OLAP connection:

- **Date Options**

Use this list to select a format for dates. This field is displayed for the Date category.

- **Time Options**

Use this list to specify a format for time values. This field is displayed for the Time category.

- **Date Time Options**

Use this list to specify a format for date and time values. This field is displayed for the Date & Time category

- **Insert**

Use this list to create a custom format, and then choose Go to add the item to the **Edit Custom Format** field. This field is displayed for the Custom category.

- **Edit Custom Format**

If you are familiar with Oracle date formatting you can enter an Oracle date format in this field. Alternatively, you can use insert format specifications by using the **Insert** drop down list. This field is displayed for the Custom category.

**Note:** Only one category can be applied to a date format at a time. Only the settings in the selected category are applied.

## Notes

- This page uses standard keyboard navigation. If you are not using a mouse, you cannot use the color grids to select a color. Instead, enter RGB values (e.g. #330033 for the color black)

---

## Format Worksheet data links page

Use the following links to display help pages that contain information about the following Discoverer Viewer Formatting pages:

- ["Conditional Formats \(Table/Crosstab\) page"](#)
- ["Create Conditional Cell Format page"](#)
- ["Create Stoplight Format page"](#)
- ["Format Cells page"](#)

## Logged Out page

---

This page is displayed when you click the Exit link in a worksheet and Discoverer logs you out and closes your session.

### **Click here to log in again**

Use this link to display the Connect to OracleBI Discoverer page where you can reconnect to Discoverer.

## Multiple Sort page

This page enables you to specify how Discoverer Viewer sorts the data displayed in worksheet columns.

### First Sort, Second Sort, Third Sort

These rows determine the priority in which sorts are applied to the displayed data.

### Column Header

Use the drop down list to select the column that you want to sort by.

### Sort Order

Use this drop down list to select a value that determines the order in which Discoverer will display column values.

Discoverer displays different values in this drop down list depending on whether the data type of the selected **Column Header** is numeric or alphanumeric, as follows:

- Ascending or Descending  
These two sort option values are displayed when the column data type is numeric (e.g. Profit Sum, Year).
- No Sort Order  
This sort option is displayed for all column data types (i.e. for both numeric and alphanumeric data).
- A-Z or Z-A  
These two sort option values are displayed when the column data type is alphanumeric (e.g. Region, City).

### Sort Type

Use this drop down list to select a value that determines whether or not Discoverer displays the **Column Header** data sorted in groups. For example, if you selected Group from this drop down list and Department was already selected from the **Column Header** drop down list, Discoverer will display data grouped by Department.

**Note:** Discoverer enables you to apply the Group value only when you select Group from the drop down list in the **First Sort** row.

Discoverer displays the following values in the drop down list:

- Normal  
Discoverer displays data sorted by the selected **Column Header**.
- Group  
Discoverer displays data in groups based on the value selected in **Column Header**.

### Hide Column

Use this check box for Discoverer to sort the table based on the values selected, but not to display any data for this column.

## PDF Ready page

This page indicates that the Portable Document Format (PDF) generation of the worksheet is complete.

Use the link on this page to display a PDF version of the entire worksheet. The PDF version was generated using the options specified on the "[Printable Page Options page: Content tab](#)" and "[Printable Page Options page: Page Setup tab](#)" pages. You can use the printable PDF version of the worksheet to view, print or save as a PDF file.

For more information, see:

- ["How to preview worksheets before printing"](#)
- ["How to print worksheets"](#)

### **Click to view or save**

Use this link to display the printable PDF version of the worksheet.

When you display the printable PDF version of the worksheet, you can print it or save a copy as a PDF file.

### **Return to worksheet**

Use this button to close the PDF Ready page and display the current worksheet.

## PDF Sample Ready page

This page indicates that the Portable Document Format (PDF) generation of the first 50 rows of the worksheet is complete. You can use this preview PDF output to confirm that the settings you specified have produced the output you expected.

Use the link on this page to display a preview PDF version of the worksheet (based on the first 50 rows of data in the worksheet). The preview PDF is generated using the options specified on the ["Printable Page Options page: Content tab"](#) and ["Printable Page Options page: Page Setup tab"](#) pages. You can use the preview PDF version of the worksheet to view, print or save as a PDF file.

For more information, see:

- ["How to preview worksheets before printing"](#)
- ["How to print worksheets"](#)

### **Open PDF to view sample**

Use this link to display the preview PDF version of the worksheet.

When you display the preview PDF version of the worksheet, you can print it or save a copy as a PDF file.

### **Printable PDF**

Use this button to generate and display a printable PDF version of the entire worksheet.

---

## Preferences page

Use this page to specify the following settings for Discoverer Viewer:

- ["Query Governor"](#)
- ["Measure Unit"](#)
- ["Summary Data"](#)
- ["Fan Trap Detection"](#)

### Query Governor

The Query Governor preferences enable you to set limits on the amount of time a query should take to complete. Use these preferences to limit the time you wait for Discoverer to run a query. These preferences set time and size limits on data as it is being retrieved from the database.

#### Warn me if predicted query time exceeds:

Select this option for Discoverer to display a message if the estimated query completion time exceeds the number of seconds that you specify here.

#### Prevent queries from running longer than:

Select this option for Discoverer to cancel a query that runs longer than the time specified here. Discoverer will display a message informing you if the query exceeds the specified time, then Discoverer cancels the query. Select this option if long running queries might affect server performance.

#### Limit retrieved query data to:

This option sets the maximum number of rows to retrieve for a query. If the database contains more rows than the number required for the query, Discoverer displays a message informing you that not all data is retrieved, and therefore the displayed data might not be complete.

#### Retrieve data incrementally in groups of:

Set this option when the database contains large tables with many rows that might take a long time to retrieve. With an entry made here Discoverer retrieves rows of data in increments rather than all at the same time. The smaller the number of rows to retrieve as a group, the faster the initial retrieval. The default data group size of 100 rows, equates to the first 10 pages of data at 10 rows per page. You can set the number of rows per page in the ["Worksheet Display page"](#) page.

#### Cancel list-of-values retrieval after:

Use this field to define the maximum time you want to wait while Discoverer retrieves the values in a list of values.

### Measure Unit

#### PDF measure unit

Use the drop down list to select a unit of measure to display PDF files (i.e. inches and centimeters).

## Axis Label

### Show Axis Label

Use the drop down list to select whether to display axis labels (i.e. Always, Never, Worksheet) as follows:

- Always  
Axis labels are always shown in crosstab worksheets after they are opened. The saved worksheet value is overridden.
- Never  
Axis labels are hidden in crosstab worksheets after they are opened. The saved worksheet value is overridden.
- Worksheet  
Axis labels are shown or hidden in crosstab worksheets depending on how they were last saved.

### Summary Data

Using summary data loads data more quickly for the work you do most often. When you request data for a worksheet, Discoverer first checks summary tables set up by the Discoverer manager to see if their saved data satisfies your request and, if it does, loads the appropriate data quickly. If the summary tables' data does not satisfy your request, Discoverer then redirects the request to the rest of the database and runs the query using the data in the database.

The preferences that are available to you here depend on whether your database supports materialized views.

For databases that support materialized views, the following options are available:

#### Always, when available

Select this option if time-sensitive data is not important for data analysis. Discoverer Viewer retrieves and displays saved data from the materialized views regardless of whether the data is current.

#### Only when summary data is not out of date (stale)

Select this option when time-sensitive data is necessary for worksheets. If the data in the materialized views is out of date (stale), Discoverer Viewer does not use the materialized views to fulfill your query request. Instead Discoverer Viewer redirects your query request to the full database and uses the latest data for the worksheet.

#### Never

Select this option if you always want Discoverer Viewer to ignore the Summary Tables and use the latest data.

**Warning:** Do not use summary tables if you normally work with the most current data in the database. The saved data in the summary tables remains constant until updated with new data. summary tables should be updated periodically to incorporate new data. The Database administrator creates summary tables based on the type of data and the type of queries you use most often. Normally, summary tables are used for the queries that take a long time to aggregate and display data. Other queries that require less time to aggregate and join data might not need summary tables. See your Database administrator if you want to use summary tables



## Fan Trap Detection

A fan-trap occurs when the data items in two folders are not directly related (such as with a Customer ID), but do have a relationship based on the data items in a third folder.

Discoverer automatically detects and resolves potential fan trap queries into multiple SQL statements to obtain normal expected results. Where Discoverer cannot resolve a fan trap, Discoverer prevents the worksheet from running and displays a warning message dialog.

If you disable fan trap detection, Discoverer still detects potential fan trap configurations, and resolves them by generating the correct SQL and displaying correct worksheet data. If Discoverer cannot resolve a fan trap, it displays the worksheet data and does not display a warning message dialog. The result of disabling fan trap detection might result in a query based on an unresolvable fan trap configuration, generating potentially misleading results.

For more information about fan traps, see the *Oracle Business Intelligence Discoverer Plus User's guide*.

## Enable fan-trap detection

Use this check box to enable fan trap detection.

---

## Printable Page Options page: Content tab

Use this page to choose the content options to use for generating a Portable Document Format (PDF) version of the current worksheet.

You can also use this page to preview a preview PDF version (i.e. the first 50 rows of data) or to generate a printable PDF version of the entire worksheet. Having created a PDF version, Discoverer displays either the ["PDF Ready page"](#) or the ["PDF Sample Ready page"](#) from where you can view, save or print the PDF file.

For more information, see:

- ["How to preview worksheets before printing"](#)
- ["How to print worksheets"](#)

### General Options

Use these options to specify general settings that apply to the entire worksheet.

### Page items

Use these radio buttons to specify how to select page items when Discoverer displays more than one page of data.

- **Print current selection of page items**  
Use this radio button to generate a PDF version for the currently displayed page items.
- **Print all combinations of page items**  
Use this radio button to generate a PDF version for all page item combinations.  
**Note:** If you select both this radio button and the **Print Graph** check box, Discoverer displays a different graph for each page item combination.

### Show page items

Use these radio buttons to specify how to print page items when Discoverer displays more than one page of data.

- **On the first page**  
Use this radio button to print page items only on the first page.
- **Never**  
Use this radio button to not print page items on any pages.

### Show title

Use these radio buttons to specify how to print the worksheet title.

- **On the first page**  
Use this radio button to print the worksheet title only on the first page.
- **Never**  
Use this radio button to not print the worksheet title on any pages.

### Data

Use these radio buttons to specify how to print the worksheet data.

- **Print all rows and columns**

Use this radio button to print all data (including data that is currently not displayed).

- **Print only the rows and columns that are displayed in the crosstab or table**

Use this radio button to print only the current window of data (e.g. if Discoverer Viewer is currently displaying rows 50-75 and columns 10-15, then only these rows and columns will be printed).

Use the following settings to specify general options that apply to the whole worksheet.

- **Print Header**

Use this check box to specify whether to print the header.

- **Print Footer**

Use this check box to specify whether to print the footer.

### **Table/Crosstab Options**

Use these options to specify table or crosstab settings that apply to the whole worksheet.

- **Print Table/Crosstab**

Use this check box to specify whether to print the table or crosstab.

- **Repeat header cells on every page**

Use this check box to specify whether to print repeats of header cells after each page break.

### **Graph Options**

Use these options to specify graph settings that apply to the worksheet. Discoverer only displays these options if there is a graph.

- **Print graph**

Use this check box to specify whether to print the graph.

- **Print gradients**

Select this check box to specify whether to print the graph with gradients. A gradient is a variation in color tone that can occur across any area in a worksheet.

**Hint:** Only use this setting if the printer quality is good. If the printer quality is good, gradients are more likely to be clearly visible on paper.

Clear this check box to not print the graph with gradients.

### **Graph size**

If you specify that you want to print the graph, specify the graph size by selecting one of the following controls.

- **Actual size**

Use this radio button to print the graph with the height and width that is currently specified in Discoverer Viewer.

- **Specified size**

Use this radio button to print the graph with a height and width that you specify.

- **Width**

Use this field to change the width of the graph.

- **Height**

Use this field to change the height of the graph.

**Note:** The default unit of measure (e.g. centimeters, inches) used to print graphs, is configured by the Discoverer manager (for more information, see the *Oracle Business Intelligence Discoverer Configuration Guide*).

### **Preview sample**

Use this button to generate a preview PDF file (based on the first 50 rows of data in the worksheet). You can display the preview PDF file to confirm that the settings you specify in this page produce the output you expect. Having created the preview PDF file, Discoverer displays the "[PDF Sample Ready page](#)" from where you can view, save or print the file.

### **Printable PDF**

Use this button to generate the PDF file. Having created the PDF file, Discoverer displays the "[PDF Ready page](#)" from where you can view, save or print the file.

**Note:** Under certain rare circumstances, printing a worksheet might require additional memory when there are many columns, even if there is a small number of rows. To work around this issue, either rotate the column axis with the row axis and try to print again, or increase the memory for the OC4J\_BI\_Forms JVM process, as described in *Oracle Business Intelligence Discoverer Configuration Guide*. For more information about changing the worksheet layout, see "[How to change the layout of a worksheet](#)".

---

## Printable Page Options page: Page Setup tab

Use this page to choose the sizing options to use for generating a Portable Document Format (PDF) version of the current worksheet.

You can also use this page to preview a preview PDF version (i.e. the first 50 rows of data) or generate a printable PDF version of the entire worksheet. Having generated a PDF version, Discoverer displays either the ["PDF Ready page"](#) or the ["PDF Sample Ready page"](#) from where you can view, save or print the PDF file.

For more information, see:

- ["How to preview worksheets before printing"](#)
- ["How to print worksheets"](#)

### Paper Setup

Use these settings to specify the paper size and page orientation for the PDF version that you use for printing.

- **Size**

Use this drop down list to choose the paper size from a list of available paper sizes.

The paper size that you specify here is represented in the preview or printable PDF version of the worksheet that is generated. When you subsequently print the PDF version of the worksheet it will appear the same as when viewed in the PDF version.

**Note:** The list of available paper sizes displayed here is configured by the Discoverer manager.

### Orientation

Use these radio buttons to specify the orientation for the PDF version that you use for printing.

- **Portrait**

Use this radio button to specify the portrait orientation for printing.

- **Landscape**

Use this radio button to specify the landscape orientation for printing.

### Margins

Use these fields to specify the size of the page margins for the PDF version that you use for printing. Page margins define the width of the border that surrounds the area where data is printed in a worksheet page. When page margins become narrower, the area where data is printed becomes greater, enabling more data to fit into on each page

- **Top**

Use this field to specify the size of the top margin.

- **Bottom**

Use this field to specify the size of the bottom margin.

- **Left**

Use this field to specify the size of the left margin.

- **Right**

Use this field to specify the size of the right margin.

**Note:** The default unit of measure (e.g. centimeters, inches) used to print worksheets, is configured by the Discoverer manager.

### Scaling

Use this drop down list to choose the percentage amount to change the size of the worksheet relative to its original size, for the PDF version that you use for printing. For example to fit a large worksheet onto a single page you might make it smaller by using this control.

After you have specified graph and column sizes (i.e. in the ["Printable Page Options page: Content tab"](#) and on this page), scaling can take effect. For example, if the original graph size is specified as 4 cm by 6 cm and you want the graph size to become 2 cm by 3 cm you can choose the 50% from the list to reduce the relative size of the graph to 50% of its original size.

### Column Sizes

Use these settings to change the width of the columns in your worksheet and specify whether to wrap the text when it exceeds the specified width, for the PDF version that you use for printing.

- **Column size (e.g. Pixels)**

Use each field to enter a number to change the width of the corresponding column.

Discoverer displays default values for column sizes as follows:

If a column size was specified in Discoverer Plus, that size is displayed here.

If no column size was specified in Discoverer Plus, the default size is calculated based on the first few hundred rows of data.

- **Always wrap text when size exceeds column width**

Select this check box to wrap text when it becomes wider than the width of a column. The default value for this check box is to be selected.

Clear this check box to not wrap text when it becomes wider than the width of a column.

**Note:** When you clear this check box and text is wider than the width of a column, Discoverer truncates the text.

### Preview

Use this button to generate a preview PDF file (based on the first 50 rows of data in the worksheet). You can display the preview PDF file to confirm that the settings you specify in this page produce the output you expect. Having created the preview PDF file, Discoverer displays the ["PDF Sample Ready page"](#) from where you can view, save or print the preview PDF file.

### Printable PDF

Use this button to generate the PDF file. Having created the PDF file, Discoverer displays the ["PDF Ready page"](#) from where you can view, save or print the PDF file.

**Note:** Under certain rare circumstances, printing a worksheet might require additional memory when there are many columns, even if there is a small number of rows. To work around this issue, either rotate the column axis with the row axis and try to print again, or increase the memory for the OC4J\_BI\_Forms JVM process, as described in *Oracle Business Intelligence Discoverer Configuration Guide*. For more information about changing the worksheet layout, see ["How to change the layout of a worksheet"](#).

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## Query Cancelled page

This page is displayed when you cancel a query from the "[Query Progress page](#)". This page will display a text message explaining that this query has been cancelled. You can rerun the query from this page.

### **Rerun**

Use this button to rerun the query.



## Query Confirmation needed page

---

This page is displayed when the query estimate is greater than the time set in the **Warn me if predicted query time exceeds:** field in the ["Preferences page"](#).

### **Run Now**

Use this button to confirm that you want to run the query now.

---

## Query Progress page

Discoverer displays the Query Progress page while a query is running. During this time you can view the query progress, refresh the query or cancel it.

**Note:** Discoverer does not display this page with worksheets created using OLAP connections.

### Query Progress Indicator

When a query is running, Discoverer displays the query progress while the query either progresses or is cancelled.

- Estimated Time - The time is displayed in the format HH:MM:SS
- Elapsed Time - The time is displayed in the format HH:MM:SS

### Cancel

This button cancels the query that is currently running.

### Refresh

Use this button to refresh the query. This may be necessary if your browser either does not update automatically, or is configured so that it will not update automatically.

### When might Discoverer display query progress?

Query progress might be displayed when:

- a query runs for more than two seconds
- running a new query
- re-running a query
- drilling
- changing page items
- changing the layout

## Save Warning page

This page is displayed when you modify an open worksheet (e.g. drill, change worksheet options, change the visible rows and columns) and click the Exit, Connect, or Workbooks link.

**Cancel**

Use this button to return to the worksheet.

**No**

Use this button to complete the action for the link that you just clicked (i.e. Exit, Connect, Workbooks), and not save the changes you made.

**Yes**

Use this button to complete the action for the link that you just clicked (i.e. Exit, Connect, Workbooks), and save the changes you made.

---

## Save Workbook As page

This page is displayed when you use the Save as link in the ["Worksheet Display page"](#). This page enables you to save the current workbook and all its worksheets to the database using a name that you enter.

### **Workbook Name**

Use this field to enter a name that you want to use to save the current workbook.

---

## Search and Select page

Use this page to search lists of values and select the values that you want. For example, when you choose a parameter that has a long list of values, you might want to search for values that begin with the letter C, and then select just the values CPM and CPN and CPO.

For more information about parameters, see:

["Edit Parameters page"](#)

### Search in

Use this drop down list (when available) to specify whether you want to display and select parameter values with or without index numbers (for more information, see ["About using indexes and values in parameters"](#)).

**Note:** You determine in Discoverer Plus whether or not the **<Index and Value>** drop down list is displayed here (for more information, see the *Oracle Business Intelligence Discoverer Plus User's Guide*).

### Search by

Use this drop down list to specify how you want to match values. For example, choose Starts With and enter 'T' as a Search for value to list only items beginning with the letter 'T'.

### Search for

Use this field to enter the text that you want to match against. For example, enter 'T' here and choose Starts With in the Search by drop down list to list only items beginning the letter 'T'.

### Go

Use this button to start the search according to the search criteria that you have specified and display matching values in the Available values list below. If you click Go when the Search for field is empty, the first group of values in the list is displayed.

### Case Sensitive

Use this check box to specify whether you want to match upper and lower case letters exactly when searching (e.g. when selected, the search term 'New York' would find 'New York', but would not find 'NEW YORK', 'new york', or 'new York').

### Available Values

This list displays values that match the search criteria that you have specified, or values displayed by default when the dialog is first displayed. Use this list to choose values that you want to select. To choose values, move values from the **Available Values** list to the **Selected Values** list.

**Note:** You can select more than one value by pressing the Ctrl key and clicking another value.

### Selected Values

Use this list to see which values are currently selected. To deselect values, move values from the **Selected values** list to the **Available values** list.

**Previous**

Use this button to display the previous set of values, if the list of values is longer than the window.

**Next**

Use this button to display the next set of values, if the list of values is longer than the window.

## Send Email page

Use this page to send an exported worksheet as an attachment to an email message. The worksheet will be sent in the file format that you selected in the "[Choose export type page](#)" page.

For more information, see:

["How to configure a client machine to automatically open exported Excel files"](#)

["What are the implications of using different export formats?"](#)

["Choose export type page"](#)

### **Sender**

Use this field to enter the email address details of the sender.

### **Recipient**

Use this field to enter the email address details of the recipient.

### **CC**

Use this field to enter the email address details of any recipients that you want to include in your c.c. list.

### **BCC**

Use this field to enter the email address details of any hidden recipients that you want to include in your b.c.c. list.

### **Subject**

Use this field to enter the text that will be displayed in the subject line of the email message.

### **Body**

Use this field to enter the email message text.

### **View Attachment**

Use this field to display the worksheet details in whatever export format you specified in the "[Choose export type page](#)".

### **Finish**

Use this button to send the email message to the specified recipients.

## Table / Crosstab Layout page

---

This page is displayed when you click the Layout and More links at the top of a worksheet.

This page enables you to rearrange items on a table or crosstab using either the Layout tool or the arrow icons. This page also enables you to specify whether to show or hide page items.

### Layout

The Layout tool enables you to rearrange table or crosstab items using the drop down lists.

Use the drop down lists to select values that determine whether to move a selected table or crosstab item or swap one item with another, and where and what to move or swap. You can continue to move or swap table or crosstab items using the drop down lists until you have achieved an acceptable table or crosstab layout.

For more information about using the drop down lists on this page, see the description under the Layout heading in ["Worksheet Display page: \(Table/Crosstab tools\)"](#).

### Show Page Items

Use this check box to show or hide page items in the worksheet.

### <Arrow icons>

Use the arrow icons as an additional method of rearranging worksheet items.

Discoverer Viewer displays the arrow icons in a sample layout that indicates the relative positions of worksheet page items, column headers, and rows when you have made changes to the table or crosstab layout.

Use the arrow icons to do the following (for both tables and crosstabs):

- move a page item to a column
- move a column to a page item
- move a column to the right or to the left of the adjacent column

Use the arrow icons to do the following (for crosstabs only):

- move a page item to a row
- move a page item to a column
- move a measure (e.g. Profit Sum, Cost) to a page item
- move a measure (e.g. Profit Sum) to a row
- move a measure (e.g. Profit Sum) to below the adjacent column
- move a column to a row
- move a column to above the adjacent column
- move a column to below the adjacent column

When you are satisfied with the layout of your table or crosstab, click Apply to display the table or crosstab using the settings you have just specified.



---

## Worksheet Display page

This page displays the worksheet data.

Use this page to work with worksheet data and graphs (e.g. to save, print, export and email worksheets and graphs, change the layout, and apply formatting). This page also enables you to select other worksheets to display from the current workbook.

For more information, see:

- ["How to change the layout of a worksheet"](#)
- ["How to sort items and measures in a worksheet"](#)
- ["Table / Crosstab Layout page"](#)

For more information about the links, tools, and controls displayed on this page, use the links below.

### **"Worksheet Display page: (Actions and Worksheet links)"**

- ["Actions"](#)
- ["Worksheets"](#)

### **"Worksheet Display page: (Page level tools and controls)"**

- ["<Hide/Show arrow icons>"](#)
- ["<Parameter tools>"](#)
- ["Page Items"](#)
- ["<Drill arrow icons>"](#)

### **"Worksheet Display page: (Table/Crosstab tools)"**

- ["Table/Crosstab"](#)
- ["Tools"](#)
- ["Layout"](#)
- ["Format"](#)
- ["Stoplight"](#)
- ["Sort"](#)
- ["Saved Selections"](#)
- ["Rows and Columns"](#)

### **"Worksheet Display page: (Graph tools)"**

- ["Graph"](#)
- ["Tools"](#)
- ["Layout"](#)
- ["Sort"](#)
- ["Graph"](#)
- ["Saved Selections"](#)

- "Data"

## Worksheet Display page: (Actions and Worksheet links)

Discoverer displays the following links on each worksheet page:

- ["Actions"](#)
- ["Worksheets"](#)

### Actions

Use the following links to carry out actions in the current worksheet:

- **Rerun Query**

Use this link to query the database and display the data for the current worksheet. This action does not undo any changes made to the worksheet that have not yet been saved.

**Note:** This link is not displayed for worksheets created using OLAP connections. To query the database for worksheets created using OLAP connections, you must open the worksheet again.

- **Save**

Use this link to save the current worksheet to the database. This link is only displayed if you own the workbook.

- **Save as**

Use this link to save the current worksheet to the database using a different name.

- **Revert to saved**

Use this link to query the database and revert all changes made to the worksheet that occurred since the last time the worksheet was saved to the database. For example, if you drill into the worksheet and then apply a cell format, the Revert to saved link would undo both these changes.

- **Printable page**

Use this link to display the ["Printable Page Options page: Content tab"](#) where you can set appropriate print options and generate and preview a PDF version of the current worksheet for printing.

- **Export**

Use this link to export the current worksheet for users to open using other applications. A number of different formats are available.

For more information, see ["Choose export type page"](#).

- **Send as email**

Use this link to send the current worksheet as email, by exporting it to a specified format and then sending it as an attachment to a specified recipient.

For more information, see ["Choose attachment type \(send as email attachment\)"](#).

- **Link layout**

Use this link to link the layout of a graph with a crosstab. For example, if you select this link, subsequent layout changes made to a crosstab can be displayed in the graph.

**Note:** This link is only displayed for worksheets that are created using OLAP connections.

- **Unlink layout**

Use this link to unlink the layout of a graph with a crosstab. For example, if you select this link, subsequent layout changes made to a crosstab will not be displayed in the graph.

**Note:** This link is only displayed for worksheets that are created using OLAP connections.

- **Worksheet options**

Use this link to display the "[Worksheet Options page](#)", where you can select display options to use in worksheets. For example, whether to display or hide the worksheet title.

## **Worksheets**

Use these links to display another worksheet from the current workbook.

## Worksheet Display page: (Graph tools)

You can use the following graph tools in a worksheet:

- "Graph"
- "Tools"
- "Layout"
- "Sort"
- "Graph"
- "Saved Selections"
- "Data"

### Graph

Use the arrow icon to display or hide worksheet graph data.

### Tools

Use the arrow icon to display or hide worksheet graph tools.

### Layout

Use this tool to rearrange the layout of the worksheet graph data.

**Note:** This option is only displayed with worksheets created using OLAP connections.

Use the drop down lists to:

- move a worksheet item to a specified position on the worksheet  
Use the **Move** option from the first drop down list, select the item that you want to move from the second drop down list, and select the location to move the item to using the third drop down list.
- swap worksheet items, rows, columns or page items with one another  
Use the **Swap** option from the first drop down list, select a worksheet item, row, column, or page item from the second drop down list, and select an option to swap with from the third drop down list.

### Sort

Use this tool to sort the graph data based on selected criteria in a worksheet. The changes made here do not affect settings made by the Table/Crosstab sort tool.

**Note:** This option is only displayed with worksheets created using OLAP connections.

- **Sort**  
Use this drop down list to select the values that you want to use to sort the worksheet data.
- **Based on**  
Use this drop down list to select a item or measure on which to base the sort order for the values that you selected in the **Sort** drop down list.
- **For**

Use this drop down list to specify the dimension members to use when sorting based on measure values.

**Note:** This option is only displayed with worksheets created using OLAP connections.

- **Order**

Use this drop down list to select a sort order for the values that you selected in the **Sort** drop down list.

- **Go**

Use this button to apply the sort settings in the current worksheet.

- **More**

Use this link to display the ["Multiple Sort page"](#), where you can specify how Discoverer Viewer sorts the data displayed in multiple worksheet columns.

**Note:** This link is not displayed with worksheets created using OLAP connections.

## Graph

Use this tool to select the graph type and specify how the graph is displayed as follows:

- **Type**

Use the first drop down list to select the graph type (e.g. Pie).

Use the second drop down list to select the graph subtype (e.g. Multiple Pie).

- **Width**

Use this field to change the display width of the graph. If you change the width, Discoverer will scale the graph height maintaining the height-to-width aspect ratio.

- **3D Effect**

Use this check box to give the graph the appearance of depth.

- **Gradient**

Use this check box to display the chart using a graded shading effect.

## Saved Selections

Use this tool to apply a previously saved selection to a dimension that is displayed in the worksheet graph.

**Note:** This tool is only displayed with worksheets created using OLAP connections.

- **Dimension**

Use this drop down list to select the dimension to which you want to apply a saved selection.

- **Action**

Use this drop down list to specify whether to add, keep, remove, or replace the members from the specified saved selection, as described in the following list.

- Add

Adds the members from the specified saved selection to the current selection.

- Keep

Keeps the members from the specified saved selection that were already present in the current selection and discards all other members.

- Remove

Removes from the current selection any members that are specified in the saved selection.

- Replace with (Default value)

Replaces the current selection with new members from the specified saved selection.

- **Saved Selection**

Use this drop down list to select the saved selection that you want to use.

- **Go**

Use this button to apply the saved selection to the dimension in the worksheet.

## **Data**

Use this tool to include in the graph either all the data in the worksheet, or just the rows and columns that are currently being displayed.

**Note:** This option is only displayed with worksheets created using OLAP connections.

- **All data**

Use this radio button to include in the graph all the worksheet data.

- **Displayed data**

Use this radio button to include in the graph only worksheet data from the rows and columns that are currently being displayed in the worksheet. For example, if Discoverer Viewer is currently displaying rows 50 to 75 and columns 10 to 15, only the data in these currently displayed rows and columns will be included in the graph.

- **Go**

Use this button to apply the settings to the graph in the current worksheet.

## Worksheet Display page: (Page level tools and controls)

You can use the following controls and tools in a worksheet page:

- "<Hide/Show arrow icons>"
- "<Parameter tools>"
- "Page Items"
- "<Drill arrow icons>"

### <Hide/Show arrow icons>

Use the Hide/Show arrow icons to hide or show information in the current worksheet. For example, click the arrow next to the word Crosstab to show (or hide) the crosstab. For more information, see ["Worksheet Display page: \(Table/Crosstab tools\)"](#).

### <Parameter tools>

If the worksheet uses parameters, the following controls are available:

- **Parameters**  
Use the arrow icon to display or hide the current parameter values.
- **<flashlight icon>**  
Use the flashlight icon to display the ["Search and Select page"](#) where you can search for and select parameter values to apply to the worksheet. For more information, see the ["Edit Parameters page"](#). Click **Go** to apply the changes.

### Page Items

Discoverer displays page item selectors above each view of the worksheet data (e.g. crosstab, graph). The page item selectors enable you to select items to apply to the whole worksheet (e.g. if the Page Items list displays departments, select a department from the list to display data for the selected department).

Use the drop down list to choose a page item value to apply to a worksheet.

### Up/Down links

Use these links to display worksheet pages where Discoverer returns more rows than it can display in one page of data.

Use the drop down list to select a value that determines how to display subsequent worksheet rows. For example, if you selected the value **3 rows**, Discoverer Viewer would display the next 3 rows of data.

### Left/Right links

Use these links to display worksheet pages where Discoverer returns more columns than it can display in one page of data.

Use the drop down list to choose a value that determines how to display subsequent worksheet columns. For example, if you selected the value **3 columns**, Discoverer Viewer would display the next 3 columns of data.

### <Drill arrow icons>

Discoverer Viewer enables you to drill into items to display additional data.



Use the drill arrow icons to display lower or higher levels of detail when using relational and OLAP connections as follows:

- When using a connection to a relational datasource, use a drill arrow icon to display a popup drill menu from where you can choose one of the following drill options:
  - Collapse
 

Use this option to drill up and hide the drill items displayed at this level of the drill hierarchy. Collapse also hides all drill items from lower levels in the drill hierarchy.
  - All Hierarchies
 

Use this popup menu to display a further popup menu of all the hierarchies created in the current business area (e.g. a date hierarchy). You can choose a hierarchy and then choose the hierarchy item you want to display in the worksheet.
  - Drill to Related
 

Use this popup menu to drill to related items from folders in the current business area that are not already included in the worksheet.

If you are not using a mouse you can navigate to the drill arrow icons using the tab key. When you press enter the "Drill page" is displayed. Use the Drill page to review the drill options and apply a new drill.

- When using a connection to an OLAP datasource, use a drill arrow icon to drill up or down the drill hierarchy to display different levels of detail as follows:
  - Expand
 

Use this option to drill down to display data at the next level in the drill hierarchy.
  - Collapse
 

Use this option to drill up and hide data from the current level in the drill hierarchy, and from all lower levels in the drill hierarchy.

If you are not using a mouse you can navigate to the drill arrow icons using the tab key. When you press enter Discoverer will drill up or down depending on the following conditions:

- If the currently highlighted drill arrow icon has not been expanded to a lower level of detail, Discoverer Viewer will drill down to display data at the next level down in the drill hierarchy.
- If the currently highlighted drill arrow icon has already been expanded to a lower level of the drill hierarchy, then Discoverer Viewer will hide the data at this level and all lower levels.

### **About drilling out to view files created in other applications**

Use the drill-out icon in a data cell to view files created in other applications. For example, clicking the symbol for a MS Word file launches MS Word within the browser and displays the file.

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## Worksheet Display page: (Table/Crosstab tools)

When a query has run, Discoverer displays the worksheet data as either a table or a crosstab, depending on how the worksheet was created:

- A table arranges items in columns. Items appear as column headings along the top axis. A table is typically used to list all information that fits the query criteria (e.g. sales transactions for the last month).

**Note:** Tables are only displayed in worksheets that use relational data.

- A crosstab arranges items or measures in rows and columns. A crosstab is typically used to display summary information and shows how one item or measure relates to another (e.g. sales by region by month).

**Note:** Crosstabs can be displayed in worksheets that use both OLAP and relational data.

### Table/Crosstab

Use the arrow icon to display or hide table or crosstab data.

### Tools

Use the arrow icon to display or hide the table or crosstab tools.

Discoverer provides the following table/crosstab tools:

- ["Layout"](#)
- ["Format"](#)
- ["Stoplight"](#)
- ["Sort"](#)
- ["Saved Selections"](#)
- ["Rows and Columns"](#)

### Layout

Use this tool to rearrange the layout of the worksheet data.

Use the drop down lists to:

- move a worksheet item to a specified position on the worksheet  
Use the **Move** option from the first drop down list, select the item that you want to move from the second drop down list, and select the location to move the item to using the third drop down list.
- swap worksheet items, rows, columns or page items with one another  
Use the **Swap** option from the first drop down list, select a worksheet item, row, column, or page item from the second drop down list, and select an option to swap with, from the third drop down list.

Use the **More** link to display the ["Table / Crosstab Layout page"](#), which enables you to rearrange the layout of worksheet data.

### Format

Use this tool to format selected worksheet data cells.

- **<bold>, <italic> and <underline> buttons**

Use these buttons to apply bold, italic and underline formats to the selected worksheet cells.

- **Number**

Use this field to select a number format from the drop down list, to format the data in the worksheet (e.g. currency, percentages).

Use the Go button to apply the number formatting to the selected cells.

- **Background**

Use the icon to display the color picker where you select a background color.

Use the Go button to apply the background color to the selected cells.

- **Font**

Use the icon to display the color picker where you select a font color.

Use the Go button to apply the font color to the selected worksheet text.

- **More**

Use this link to display the "[Format Cells page](#)" where you specify format options for selected crosstab worksheet cells.

- **Create Conditional Format**

Use this link to display the "[Create Conditional Cell Format page](#)", where you can create a new conditional format to highlight worksheet values.

- **Conditional Formats**

Use this link to display the "[Conditional Formats \(Table/Crosstab\) page](#)", where you can create, edit and delete conditional formats for the data in the worksheet.

## **Stoplight**

Use this tool to define a stoplight format to categorize data for the current worksheet. Discoverer can apply one of three stoplight colors to worksheet data depending on the value of the data. The stoplight colors represent unacceptable, acceptable, and desirable data ranges.

- **Format**

Use this field to specify what to apply the stoplight format to (e.g. selected cells, all worksheet cells).

- **Unacceptable**

Use this field to enter a value that specifies the unacceptable values of the stoplight range. When the value of worksheet data is less than or equal to this value, Discoverer displays the data in the color displayed in the color picker icon. To change the color displayed in the color picker icon, click the color picker icon and select a new color from the color palette.

- **Acceptable**

Discoverer determines this range as falling between the unacceptable and desirable values. When worksheet data values falls within this range, Discoverer displays the data in the color displayed in the color picker icon. To change the color displayed in the color picker icon, click the color picker icon and select a new color from the color palette.

- **Desirable**

Use this field to enter a value that specifies the desirable values of the stoplight range. When the value of worksheet data is greater than or equal to this value, Discoverer displays the data in the color displayed in the color picker icon. To change the color displayed in the color picker icon, click the color picker icon and select a new color from the color palette

- **Go**

Use this button to apply the stoplight settings for the specified data values in the current worksheet.

- **Conditional Formats**

Use this link to display the "[Conditional Formats \(Table/Crosstab\) page](#)", where you can create, edit and delete conditional formats for the data in the worksheet.

## **Sort**

Use this tool to sort the worksheet data based on selected criteria in a worksheet.

**Note:** This tool is displayed with table worksheets and with worksheets created using OLAP connections.

- **Sort**

Use this drop down list to select the values that you want to use to sort the worksheet data.

- **Based on**

Use this drop down list to select a item or measure on which to base the sort order for the values that you selected in the **Sort** drop down list.

**Note:** This option is only displayed with worksheets created using OLAP connections.

- **For**

Use this drop down list to specify the dimension members to use when sorting based on measure values.

**Note:** This option is only displayed with worksheets created using OLAP connections.

- **Order**

Use this drop down list to select a sort order for the values that you selected in the **Sort** drop down list.

- **Go**

Use this button to apply the sort settings in the current worksheet.

- **More**

Use this link to display the "[Multiple Sort page](#)", where you can specify how Discoverer Viewer sorts the data displayed in multiple worksheet columns.

**Note:** This link is not displayed for worksheets created using OLAP connections.

## **Saved Selections**

Use this tool to apply a previously saved selection to a dimension that is displayed in the worksheet.

**Note:** This tool is only displayed with worksheets created using OLAP connections.

- **Dimension**

Use this drop down list to select the dimension to which you want to apply a saved selection.

- **Action**

Use this drop down list to specify whether to add, keep, remove, or replace the members from the specified saved selection, as described in the following list.

- Add

Adds the members from the specified saved selection to the current selection.

- Keep

Keeps the members from the specified saved selection that were already present in the current selection and discards all other members.

- Remove

Removes any members from the current selection that are specified in the saved selection.

- Replace with (Default value)

Replaces the current selection with new members from the specified saved selection.

- **Saved Selection**

Use this drop down list to select the saved selection that you want to use.

- **Go**

Use this button to apply the saved selection to the dimension in the worksheet.

## **Rows and Columns**

Use this tool to set the number of rows and columns you want to display on each page. You can change the default number of rows and columns that Discoverer displays here (for more information, see "[Preferences page](#)").

- **Rows**

Use this field to set the maximum number of rows of data that Discoverer will display on a page.

- **Columns**

Use this field to set the maximum number of columns of data that Discoverer will display on a page.

- **Go**

Use this button to apply the numbers of rows and columns that you want to display on each page in the current worksheet.

## Worksheet List page

This page enables you to search for and select a worksheet to display, from the list of available workbooks. A workbook contains worksheets that display related data, but combined using different perspectives. For example, a workbook may show the sales history for Product A. However, one worksheet could show sales for last month, another worksheet could show sales compared to the same month five years ago, and another could show sales per region. All three worksheets contain sales data related to Product A, but each is organized to show a different perspective.

For more information, see:

- ["How to open a Discoverer worksheet"](#)

### Search

You can select workbooks either from a list of available database workbooks or from a list of scheduled workbooks that have already run (scheduled workbooks are not available for OLAP connections).

Use the **Search** drop down list to display the available Database Workbooks or Scheduled Workbooks.

- Database Workbooks

Discoverer will query the database to display the latest data, and the results are not stored.

- Scheduled Workbooks (not available with OLAP connections)

Discoverer has already run the query at a predetermined time and the results have been stored in the database.

Use the **Search** field to refine the list of workbooks to display in the Result List. Enter partial or full details for any matching workbook names you want to display and click the Go button. The **Search** field is case insensitive.

**Note:** Wildcards such as " \* ? %" etc. are unnecessary and should not be used in the search.

### Result List

The list of workbooks displayed in this area will include workbook names that match the details entered in the **Search** field.

### Expand All/Collapse All

Use these links to display or hide all workbook and worksheet details.

Use the Expand link to display workbook and worksheet details for all workbooks.

Use the Collapse All link to hide workbook and worksheet details for all workbooks.

### Discoverer Workbooks

Use this link to display all Discoverer workbooks.

**Note:** Discoverer only displays this link after you use the target icon in the Focus column to display the details of a specific workbook (for more information, see the Focus column).

**Focus**

Use the target icon to hide details for all folders/workbooks except the one selected.

**Name**

Use the arrow icons to display or hide workbook and worksheet details.

Use a link in the Name column to display a worksheet.

**Description**

This column displays the description of the workbook.

**Owner**

This column displays the name of the owner of the workbook.

**Last modified**

This column displays the date that the workbook was last modified.

## Worksheet Options page

This page enables you to change some settings related to the current worksheet.

### Display Options

#### Title

Use this check box to display the title in the worksheet.

#### Table/Crosstab

Use this check box to display the table or crosstab data in the worksheet (displayed with Oracle Applications or relational database connections).

Use this radio button to display the crosstab data (displayed with worksheets created using OLAP connections).

#### Graph

Use this check box to display the graph in the worksheet (displayed with Oracle Applications or relational database connections).

Use this radio button to display the graph in the worksheet (displayed with worksheets created using OLAP connections).

#### Both

Use this radio button to display the graph and the crosstab data in the worksheet (only displayed with OLAP connections).

#### Text Area

Use this check box to display the text area in the worksheet.

### Sheet Options

#### Show axis labels

Use this check box to display crosstab header labels in the worksheet.

#### Show null values as

Where no data is returned for a field in a worksheet you can define here how the data is displayed. For example, if you enter 'Zero' in this field, worksheets will display the word 'Zero' where no data is returned.

#### Show values that cannot be aggregated as:

When a worksheet tries to aggregate an item that cannot be aggregated (for example Rank), you can define here how the data is displayed. For example, if you enter 'N/A' in this field, worksheets will display the text 'N/A' where the data cannot be aggregated.



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# Index

## C

---

- cells
  - formatting, 3-8
- changing layout
  - in worksheets, 3-18
- conditional formats
  - activating and deactivating, 3-10
  - changing the precedence of, 3-11
  - creating, 3-11
  - deleting, 3-13
  - editing, 3-13
  - using, 3-9
- conditional header format
  - creating, 3-12
  - what is it?, 3-10
- connecting directly
  - about starting Discoverer Viewer, 2-5
- connections
  - about (see Discoverer connections), 2-1
- crosstab worksheets, 1-6
- cube
  - about components, 1-6

## D

---

- database accounts
  - about, 2-8
- dimension
  - about dimension attributes, 1-7
  - about hierarchies, 1-7
- Discoverer
  - about, 1-1
  - changing passwords, 2-12
  - components, 1-1
  - how to change passwords, 2-12
  - how to exit, 2-7
  - how to start, 2-2, 2-3
- Discoverer connections
  - about, 2-1
  - about public, 2-12
  - changing EULs, 2-13
  - creating, 2-8
  - deleting, 2-11
  - editing, 2-10
- Discoverer portlets

- error workaround when launching worksheets in Viewer with parameter LOVs, 4-19

### Discoverer Viewer

- about, 1-1
- new features, 1-4
- why use, 1-2

### drill page

- dialog information, 4-18
- how to display, 4-56

### drilling

- differences between relational and OLAP connections, 4-56
- drilling down in worksheets, 3-17
- drilling up in worksheets, 3-18
- in Discoverer Viewer, 3-17

## E

---

### email

- sending worksheets in an email, 3-8

### email worksheet

- in html format, 4-5

### End User Layer

- about, 2-8

### EUL

- about, 2-8

### exiting Discoverer

- how to exit, 2-7

### export

- configuring a client machine to open exported Excel files, 3-7

### export formats

- the implications of using different export formats, 3-5

### export worksheet

- in html format, 4-5

## F

---

### format

- formatting worksheet items and cells, 3-8
- frequently asked questions, 2-7

## G

---

- graphs

- displaying and hiding, 3-15
- editing, 3-14
- using in Discoverer Viewer, 3-14

---

## H

- html worksheets
  - note about exporting and emailing, 4-5

---

## I

- indexes and values
  - using in parameters, 3-15
- items
  - formatting, 3-8

---

## M

- memory
  - workaround when more memory is required to
    - print worksheets with many columns, 4-38
- multiple browser windows
  - opening, 2-2

---

## N

- new features
  - about, 1-4

---

## O

- opening
  - a worksheet, 3-1

---

## P

- parameter values
  - applying different parameter values to
    - worksheets, 3-16
- parameters
  - LOV error workaround when launching
    - Discoverer portlet worksheets in
      - Viewer, 4-19
  - using in Discoverer Viewer, 3-15
  - using indexes and values in, 3-15
- precedence of a conditional format
  - changing, 3-11
- preview worksheet
  - before printing, 3-4
- printing
  - worksheets workaround when additional memory
    - is required to print many columns, 4-38

---

## S

- sample pdf
  - previewing, 3-4
- saved selections
  - applying, 3-19
- saving worksheets, 3-3
- Single Sign-on

- about, 2-13
- passwords and Discoverer passwords, 2-13
- sorting
  - items and measures in a worksheet, 3-16
- starting Discoverer
  - how to start, 2-2, 2-3
- starting Discoverer Viewer
  - connecting directly, 2-5
- stoplight format
  - creating, 3-12
  - what is it?, 3-10

---

## T

- table worksheets, 1-5

---

## W

- why use Discoverer Viewer?, 1-2
- workbooks
  - about, 1-5
- worksheets
  - about, 1-5
  - about crosstab, 1-6
  - about table, 1-5
  - applying different parameter values to, 3-16
  - changing the layout, 3-18
  - drilling down, 3-17
  - drilling up, 3-18
  - exporting, 3-5
  - how to save, 3-3
  - opening, 3-1
  - printing, 3-4
  - sorting items and measures, 3-16
  - types of, 1-5