## Oracle® Fusion Middleware

User's Guide for Oracle Business Intelligence Enterprise Edition 11g Release 1 (11.1.1)

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Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition, 11g Release 1 (11.1.1)

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## Glossary

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## **Preface**

Oracle Business Intelligence Enterprise Edition (Oracle BI EE) is a comprehensive set of enterprise business intelligence tools and infrastructure, including a scalable and efficient query and analysis server, an ad-hoc query and analysis tool, interactive dashboards, proactive intelligence and alerts, real-time predictive intelligence, and an enterprise reporting engine. Oracle Business Intelligence is designed to bring greater business visibility and insight to a wide variety of users.

Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition is part of the documentation set for Oracle BI EE. This guide contains information about using Oracle Business Intelligence to organize and present data for making critical and timely business decisions.

## **Audience**

This document is intended for anyone who plans to organize and present data for making critical and timely business decisions using Oracle Business Intelligence, such as a middle tier administrator, report specialist, departmental reporter, or information consumer. (This guide refers to report specialists and departmental reporters collectively as content designers, and to information consumers as end users.)

## **Documentation Accessibility**

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## **Related Documents**

For more information, see the following documents in the Oracle Business Intelligence Enterprise Edition 11*g* Release 1 (11.1.1) documentation set:

- Oracle Fusion Middleware Release Notes for your platform
- Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition
- Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition
- Oracle Fusion Middleware Developer's Guide for Oracle Business Intelligence Enterprise Edition
- Oracle Fusion Middleware Installation Guide for Oracle Business Intelligence
- Oracle Fusion Middleware Upgrade Guide for Oracle Business Intelligence
- Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition

## **Conventions**

The following text conventions are used in this document:

| Convention | Meaning  |
|------------|--|
| boldface   | Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.         |
| italic     | 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. |

# New Features for Oracle Business Intelligence Users

This preface describes new features and upgrade considerations in Oracle Business Intelligence Enterprise Edition 11*g* Release 1 (11.1.1).

This preface contains the following topics:

- "New Features"
- "Upgrade Considerations"

### **New Features**

New features in Oracle Business Intelligence Enterprise Edition include:

- Key Terminology Changes
- Major User Interface Improvements
- New Column Type and Related Operations
- Enhancements to Views
- Calculated Items and Groups
- Multiple Subject Areas
- Interaction with Other Oracle Products
- SQL Functions for Time Series Calculations and Level-Based Measures
- Embedded Database Functions
- Enhancements to Formatting
- Enhancements to the Oracle BI Presentation Catalog
- Full-Text Search Capability
- Actions
- Conditions
- Enhancements to Agents
- Key Performance Indicators (KPIs)
- Oracle Scorecard and Strategy Management

#### **Key Terminology Changes**

In this release, the following terminology changes have been made:

- iBots have been renamed to agents (also known as intelligent agents)
- Requests (or reports) have been renamed to analyses, and the term reports now refers to BI Publisher reports
- Presentation columns have been renamed to attribute columns
- Charts have been renamed to graphs
- Security terminology and architecture has changed. For more information, see Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition

#### **Major User Interface Improvements**

The user interface has undergone major improvements in several areas, including a new Home page and redesigned editors and panes. These improvements are intended to make working with Oracle BI EE easier and more consistent. This guide provides detailed information on working with the various pieces of the user interface.

The interface has been enhanced to better serve the needs of users with disabilities. For information, see Appendix E, "Accessibility Features."

#### **New Column Type and Related Operations**

In previous releases, you included presentation columns and measure columns in analyses. With this release, **presentation columns** have been renamed to **attribute columns** and a new column type, **hierarchical column**, is introduced. For information, see "What Are Subject Areas and Columns?"

Along with the new column type comes new ways to do the following:

- Limit the data that is displayed in an analysis. You can continue to use a filter to limit the data for an attribute column, and you can use a "selection step" to limit data for columns by specifying the criteria for a set of members. See "Working with Selections of Data" for information.
- Drill in data. You can drill to expand and collapse values in views such as tables, pivot tables, graphs, and maps. For information, see "Drilling in Views".
- Sort data values. You can apply sorts to members, measures, and rows in views such as tables, pivot tables, graphs, and maps. Sorting is now enabled by default. See "Sorting Data in Views" for information.

#### **Enhancements to Views**

Several of the view types have been enhanced, including those in the following list:

- Table and pivot table have been enhanced to function more consistently and to display hierarchical columns. In a pivot table, you can easily drag and drop columns to various edges, to rearrange the display to suit your needs.
  - See "Editing Table and Pivot Table Views" for information.
- Graph and gauge have been enhanced with additional functionality. For example, you can define section sliders for graphs and gauges. (For information about section sliders, see "Defining Section Sliders in Graphs and Gauges".
  - See "Editing Graph Views" and "Editing Gauge Views" for information.
- Map view is a new view type that presents data in spatial form. Through location context, map views allow users to easily discover trends and transactions across regions that might not be obvious in tables or graphs.
  - See "Editing Map Views" for information.

In addition to view enhancements, this release includes an enhanced Layout pane to accompany those views in which you can manipulate data. See "Modifying the Layout of Data in Views" for information.

In this release, you can also create master-detail relationships among certain view types. For information, see "What is Master-Detail Linking of Views?"

#### **Calculated Items and Groups**

You can continue to create calculated items to perform mathematical operations on members. In previous releases, you could create a calculated item for an attribute column. In this release, you can create a calculated item for the members of an attribute column or of a hierarchical column.

In this release, you can create a "group" of members to display in a view. The group inherits the aggregation function of the measure column with which it is displayed.

See "Working with Groups and Calculated Items" for information.

#### **Multiple Subject Areas**

In this release, you can work with multiple subject areas. In addition to the primary subject area that you select when you create a new analysis, filter, or dashboard prompt, you can include additional subject areas that are related to the primary subject area with which to work.

For information, see:

- "What Are Subject Areas and Columns?"
- "Specifying the Criteria for Analyses"
- "Creating or Editing Column Filters"
- "Creating or Editing a Column Prompt"

In addition, you can view metadata information for subject areas, folders, columns, and hierarchy levels. See "Viewing Metadata Information from the Subject Areas Pane" for information.

#### Interaction with Other Oracle Products

In this release:

- Oracle BI Publisher is a fully integrated member of the Oracle BI EE suite by default. All of the BI Publisher functionality appears seamlessly within the Oracle BI EE application, and all of the reports and related objects are created within Oracle BI EE and saved to the Oracle BI Presentation Catalog.
  - For information, see "How Does Oracle BI EE Interact with Other Products?"
- Oracle Hyperion Smart View is available for download from the Oracle BI EE Home page.
  - For information, see "Integration of Oracle BI EE with Oracle Enterprise Performance Management System".
- The integration of Oracle BI EE with Oracle Business Intelligence Add-in for Microsoft Office has been enhanced.
  - For information, see Appendix D, "Integrating with Microsoft Office."

#### SQL Functions for Time Series Calculations and Level-Based Measures

The following new and revised SQL functions enable you to create time series calculations and level-based measures:

- PERIODROLLING is a new function that computes the sum of a measure over the period starting *x* units of time and ending *y* units of time from the current time.
- AGGREGATE AT is a new function that aggregates columns based on the level or levels specified.
- AGO is a time series aggregation function that calculates the aggregated value from the current time back to a specified time period. In this release, the time\_level argument is optional, and there are additional syntax changes. This function was called PERIODAGO in the previous release.
- TODATE is a time series aggregation function that aggregates a measure attribute from the beginning of a specified time period to the currently displayed time. The syntax for this function has changed in this release. This function was called PERIODTODATE in the previous release.

For more information about these functions, see "Aggregate Functions" and "Calendar Date/Time Functions".

#### **Embedded Database Functions**

You can create analyses by directly calling database functions from either Oracle Business Intelligence, or by using a Logical column (in the Logical Table source) within the metadata repository. Key uses for these functions include the ability to pass through expressions to get advanced calculations, as well as the ability to access custom written functions or procedures on the underlying database. Supported functions include EVALUATE\_EVALUATE\_AGGR, and EVALUATE\_PREDICATE. See "Database Functions" for information.

#### **Enhancements to Formatting**

This release includes enhancements to the way that default formatting is handled. Conditional formatting has been enhanced to work with pivot tables and with hierarchical columns. For complete information, see Chapter 7, "Formatting Analyses, Views, and Dashboard Pages."

#### **Enhancements to the Oracle BI Presentation Catalog**

The Oracle BI Presentation Catalog is a powerful, underlying storage directory-based system that contains the objects (dashboards, scorecards, prompts, and KPIs for example) that you create. If you use BI Publisher, then the catalog also contains BI Publisher data and objects (data models and schedules, for example). Using the catalog, you can:

- Perform basic tasks such as creating, deleting, and copying objects and folders.
- Perform object-specific tasks (for example, modifying settings using the associated editor, or creating and assigning an agent).
- Find objects by performing a search.

In addition to these tasks, administrators can:

- Access the root folder that contains system-wide object and user data.
- Specify permissions that determine the folders and objects that users can view.
- Create folders.

- Work with properties such as changing the ownership of a folder or viewing the creation date of an object.
- Archive the entire catalog, folders, or objects to unzip them in another directory location.

For complete information, see Chapter 13, "Managing Objects in the Oracle BI Presentation Catalog."

#### **Full-Text Search Capability**

This release provides a mechanism for searching for objects in the Oracle BI Presentation Catalog that is similar to a full-text search. You can search for objects by various attributes, such as name and description. See "Searching Using Full-Text Catalog Search" for information.

#### **Actions**

In this release, you can create actions that navigate to related content or that invoke operations, functions, or processes in external systems. You can include actions in analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs. End users can then invoke these actions, for example, as they gain insight from analyzing data in analyses or from viewing dashboards. For information, see Chapter 10, "Working with Actions."

#### **Conditions**

In this release, you can create new objects called conditions. Conditions return a single Boolean value that is based on the evaluation of an analysis or of a key performance indicator (KPI). You can use conditions to determine whether agents deliver their content and execute their actions, whether actions links are displayed in dashboard pages, and whether sections and their content are displayed in dashboard pages. For complete information, see Chapter 9, "Working with Conditions."

#### **Enhancements to Agents**

In this release, the functionality of agents (previously called iBots) has been enhanced to incorporate support for conditions and for actions. For information, see Chapter 8, "Delivering Content."

#### **Key Performance Indicators (KPIs)**

In this release, you can create KPIs to represent business measures or metrics (Units Shipped, Manufacturing Costs for example) that you want to monitor, improve, and use to evaluate the performance of the objectives and initiatives that comprise levels of organizational strategy. Use KPIs to perform these tasks:

- Collect and present business metrics in a variety of formats such as custom views, analyses, and dashboards.
- Aggregate data where KPIs intersect other metrics by specifying dimensionality.
  For example, a Product Sales KPI can be dimensioned by Region and Fiscal Time
  to view Product Sales by region and different periods of time such as financial
  quarter.

To proactively respond to changes in KPI performance, you can create the following:

- Agents that notify you when a KPI assesses a specific performance state, such as warning.
- Action links that are tasks associated with performance state.

 Create a KPI Watchlist of the KPIs that you want to monitor the most frequently or closely.

See "Using KPIs and KPI Watchlists" and "Creating or Editing KPI Watchlists" for information.

#### **Oracle Scorecard and Strategy Management**

In this release, you can use Oracle Scorecard and Strategy Management to articulate, evaluate (scorecard), and evolve the performance of your organization or key business areas. You can use Oracle Scorecard and Strategy Management to define, depict, and monitor the progress of the strategic goals and requirements (objectives) key to corporate functions, and the tasks and projects (initiatives) that are required to achieve those goals.

For information, see Chapter 12, "Scorecarding."

## **Upgrade Considerations**

The following list identifies various items that you need to be aware of if your organization has upgraded from Oracle Business Intelligence 10*g* to Oracle Business Intelligence 11*g* Release 1 (11.1.1):

- Actions created in previous releases. See "How Will Actions Created in Previous Releases Be Upgraded?"
- Analyses that used "Advanced SQL" and were created in previous releases. See "Editing Upgraded Analyses that Contain "Advanced SQL"".
- Calculated items created in previous releases. See "How Will Calculated Items Created in Previous Releases Be Upgraded?"
- Hidden dashboards created in previous releases. See "Saving Dashboards By Other Names and In Other Locations".
- iBots (now known as agents) created in previous releases. See "How Will iBots Created in Previous Releases Be Upgraded?"
- Interactions in views. See "How Will Interactions Created in Views in Previous Releases Be Upgraded?"
- Measure columns created in previous releases. See "How Will Measure Columns Created in Previous Releases Be Upgraded?"
- Totals created in previous releases. See "How Will Report-Based Totals Created in Previous Releases Be Upgraded?"
- Sorts specified in previous releases. See "How Will Sort Specifications Created in Previous Releases Be Upgraded?"
- Custom files, such as images and help files, that were stored locally in your Oracle Business Intelligence environment. See "Storing Custom Files Locally and Using the fmap Function to Reference Them".
- Charts (now known as graphs) created in previous releases. See "How Has the Behavior of Charts Created in Previous Releases Changed?"
- Agents folders. During the upgrade, the previously hidden folder named -ibots is renamed Agents, is no longer hidden, and appears in the My Folders and Shared Folders folders.

For information about upgrading to Oracle Business Intelligence 11g, see *Oracle Fusion Middleware Upgrade Guide for Oracle Business Intelligence*.

## **Introducing Oracle Business Intelligence Enterprise Edition**

This chapter provides a conceptual overview of Oracle Business Intelligence Enterprise Edition 11*g* Release 1 (11.1.1). This chapter contains the following topics:

- "Introduction to Oracle BI Enterprise Edition"
- "What Is the Oracle BI Presentation Catalog?"
- "Signing In to Oracle BI Enterprise Edition"
- "Signing Out of Oracle BI Enterprise Edition"
- "Navigating Oracle BI Enterprise Edition"
- "What Is the Oracle BI EE Home Page?"
- "What Is the Oracle BI EE Global Header?"
- "Where Can I Get Help or More Information?"
- "About Acting for Other Users"
- "Acting for Other Users"
- "Setting Preferences"
- "How Does Oracle BI EE Interact with Other Products?"
- "Topics of Interest in Other Guides"
- "System Requirements and Certification"

## **Introduction to Oracle BI Enterprise Edition**

Oracle BI Enterprise Edition (sometimes simply referred to as Oracle Business Intelligence) provides a full range of business intelligence capabilities that allow you to:

- Collect up-to-date data from your organization
- Present the data in easy-to-understand formats (such as tables and graphs)
- Deliver data in a timely fashion to the employees in your organization

These capabilities enable your organization to make better decisions, take informed actions, and implement more-efficient business processes.

Figure 1–1 shows a dashboard that presents organizational data in easy-to-understand formats (tables, graphs, and so on).

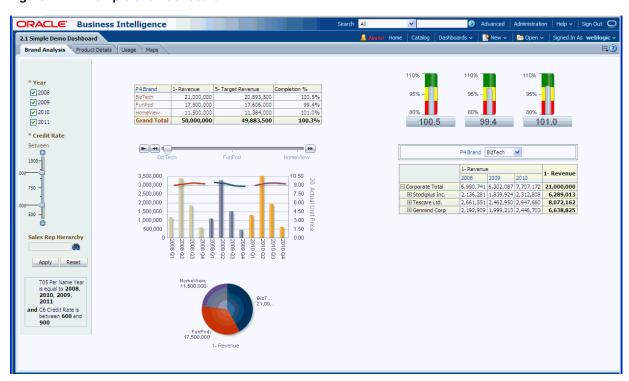


Figure 1–1 Example of a Dashboard

In Oracle BI Enterprise Edition, you can work with:

**Analyses** — (This area of Oracle BI EE is also known as Answers.) Analyses are queries against an organization's data that provide answers to business questions. Analyses allow you to explore and interact with information by visually presenting data in easy-to-understand formats (such as tables and graphs). You can save, organize, and share the results of analyses.

Your organization might also have purchased prebuilt analyses specific to your industry. Prebuilt analyses can be used as purchased or modified to suit your business's information needs.

For information on working with analyses, see Chapter 2, "Creating Analyses."

**Dashboards** — (This area of Oracle BI EE is also known as Interactive Dashboards.) Dashboards provide personalized views of corporate and external information. A dashboard consists of one or more pages that contain content, such as analyses, links to Web sites, Oracle BI Publisher reports, and so on. Dashboards allow you to provide end users with access to analytics information.

Your organization might also have purchased preconfigured dashboards that contain prebuilt analyses specific to your industry.

For information on working with dashboards, see Chapter 4, "Building and Using Dashboards."

- Filters, Selection Steps, and Prompts Filters, selection steps, and prompts allow you to limit or specify the data that is displayed in dashboards and analyses.
  - For information on working with filters and selections steps, see Chapter 5, "Filtering and Selecting Data for Analyses." For information on working with prompts, see Chapter 6, "Prompting in Dashboards and Analyses."
- **Agents** (This area of Oracle BI EE is also known as Delivers.) Agents enable you to automate your business processes. You can use agents to provide event-driven

alerting, scheduled content publishing, and conditional event-driven action execution. Agents can be scheduled or can be triggered by a specific condition, which allows you to deliver timely information to users.

For information on working with agents, see Chapter 8, "Delivering Content."

**Conditions** — Conditions are objects that return a single Boolean value that is based on the evaluation of an analysis or of a Key Performance Indicator (KPI). You use conditions to determine whether something is to be done, for example whether an agent is to deliver its content.

For information on working with conditions, see Chapter 9, "Working with Conditions."

**Actions** — Actions provide functionality to navigate to related content or to invoke operations, functions, or processes in external systems. You can include actions in various objects, such as analyses and dashboard pages. Actions allow users to take the proper action based on the business insight that they gained from the data that they received.

For information on working with actions, see Chapter 10, "Working with Actions."

Scorecards — (This area of Oracle BI EE is known as Oracle Scorecard and Strategy Management). Scorecards allow you to model the objectives and initiatives that comprise your corporate strategy, evaluate their performance by assigning KPIs, and determine and display overall performance.

For information on working with scorecards, see Chapter 12, "Scorecarding."

Other Products — Oracle BI EE interacts in various ways with other products. For example, with the Oracle Business Intelligence Add-in for Microsoft Office, you can access and run analyses from Oracle BI EE directly within your Microsoft Office workspace.

For information, see "How Does Oracle BI EE Interact with Other Products?"

## What Is the Oracle BI Presentation Catalog?

The Oracle BI Presentation Catalog stores the objects, such as analyses, dashboards, and KPIs, that you and other users create using Oracle BI EE. Users have their own personal folder (My Folders), where they can store the objects that they create. The objects in a personal folder can be accessed only by the user who created and saved the content into that folder. Users can add sub-folders to their personal folders to organize their content in the way that is the most logical to them.

You can also store objects in shared folders where other users or groups can access the objects. A combination of business logic security, catalog object security, and data level security determines who has the ability to view data and objects, edit objects, and delete objects from the catalog. Your administrator creates and maintains the catalog's shared folder structure.

For more information, see "Managing Objects in the Oracle BI Presentation Catalog". For information about setting up the catalog, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Signing In to Oracle BI Enterprise Edition

To access Oracle BI EE, you use a URL, a user ID, and a password that have been provided by your organization.

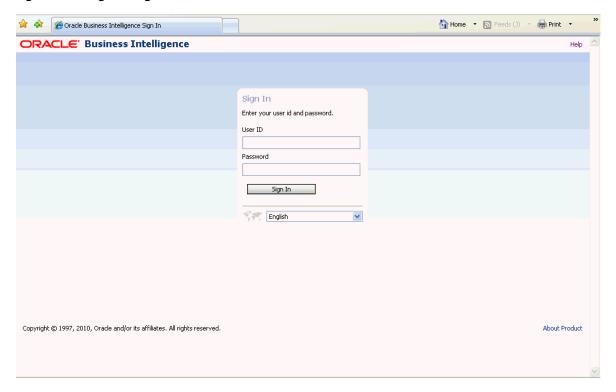
**Note:** Oracle BI EE requires that the Web browser be set to accept cookies. It uses a cookie to track a user's signed-in session.

#### To sign in to Oracle BI Enterprise Edition:

1. In the address field of your browser, enter the URL that was provided by your organization.

The "Sign In page" is displayed. Figure 1–2 shows the Sign In page.

Figure 1-2 Sign In Page for Oracle BI EE



- **2.** Enter your user ID and password.
- **3.** Select the language in which you want to work.

You can change the default entry for this box by selecting another language in the **User Interface Language field** in the "My Account dialog: Preferences tab". For more information, see "Setting Preferences".

- Click **Sign In**. One of the following pages (depending on what has been configured for you) is displayed:
  - Your personal dashboard, named My Dashboard.
  - The "Home page". For information on the Home page, see "What Is the Oracle BI EE Home Page?"
  - A dashboard that is specific to your job function (for example, Call Center representative).

A dashboard (whether My Dashboard or one specific to your job function) typically contains analyses and other information for your area of responsibility. Figure 1–1 shows an example of a dashboard.

You can now navigate Oracle BI EE. For information, see "Navigating Oracle BI Enterprise Edition".

**Tip:** Once you have signed in, you can select the dashboard that you want to be displayed when you sign in thereafter. For information, see "Setting Preferences".

## Signing Out of Oracle BI Enterprise Edition

**Note:** Do not close the browser window to sign out of Oracle BI EE.

#### To sign out of Oracle BI EE:

1. In the global header, click **Sign Out**.

## Navigating Oracle BI Enterprise Edition

After signing in to Oracle BI EE (as described in "Signing In to Oracle BI Enterprise Edition"), you are presented with one of the following pages, depending on what has been configured for you:

- Your personal dashboard, named My Dashboard
- The "Home page"
- A dashboard that is specific to your job function (for example, Call Center representative)

This page is your starting point for working in Oracle BI EE. As you work, you can use the global header and the Home page as the primary ways to navigate Oracle BI EE:

The global header — The global header is displayed at the top of the Oracle BI EE interface and is always available as you work. It allows you to easily access the functionality that Oracle BI EE provides. For example, you can access the Home page, access dashboards, open objects (such as analyses and dashboard prompts), create new objects, and so on.

For information on the global header, see "What Is the Oracle BI EE Global Header?"

**The Home page** — From the Home page, you can learn how to get started with Oracle BI EE, create and modify objects, and browse and manage objects in the catalog.

For information on the Home page, see "What Is the Oracle BI EE Home Page?"

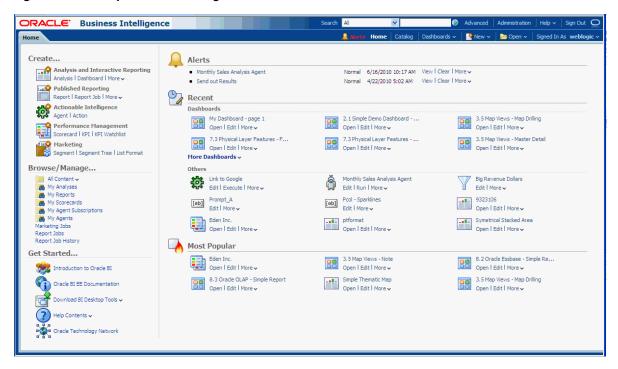
After you have accessed the starting point of a task, the interface then presents you with the page, dialog, or editor that you need to perform the task.

### What Is the Oracle BI EE Home Page?

The Home page provides a starting point for performing tasks in Oracle BI EE. The Home page is divided into sections that allow you to quickly begin a specific task, locate an object, or access technical documentation. It also includes sections that allow you to quickly access objects that you have recently viewed, created, or updated, and objects that are accessed the most often by the users assigned to the groups to which you belong.

Figure 1–3 shows an example of a Home page.

Figure 1-3 Example of a Home Page



For specific information about each area on the Home page, see "Home page".

Depending on what has been configured as your starting page, you might be presented with the Home page when you sign in to Oracle BI EE.

Otherwise, you can always navigate to the Home page by clicking the **Home** page link in the global header. For information on the global header, see "What Is the Oracle BI EE Global Header?"

### What Is the Oracle BI EE Global Header?

The global header provides quick access to commonly used functions and is always available from the user interface. For example, you can use the global header to begin a new task, search the Oracle BI Presentation Catalog, access the product documentation, or view a different object, without having to return to the Home page. The global header also includes the **Home** page link so that you can quickly access the Home page from other pages.

Figure 1–4 shows the global header.

Figure 1-4 Oracle BI EE Global Header



The global header includes the following components:

**Search** — Allows you to search the catalog. For information on how to use this area, see "How Can I Search for Objects?"

- **Advanced** Displays the "Catalog page" in search mode, where you can search for objects in the catalog. In search mode, the "Search pane" is displayed rather than the "Folders pane" within the page.
- **Administration** Available only if you are logged in as an administrator. Displays the "Administration page", where perform administration tasks such as managing privileges and metadata for maps. For information on the administration tasks, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition and Oracle Fusion Middleware Security *Guide for Oracle Business Intelligence Enterprise Edition.*
- **Help** Displays the following options:
  - *xxx* **Help** (where *xxx* is the name of the page, editor, or tab) Dynamically changes to display the Help topic for the current page, editor, or tab.
  - **Help Contents** Displays a cascading menu that provides options that link to the tables of contents for Oracle BI EE, BI Publisher, and Marketing.
  - **Documentation** Displays the documentation library for Oracle BI EE.
  - **OTN** Displays the Business Intelligence and Data Warehousing Technology Center page on the Oracle Technology Network (OTN).
  - **About Oracle BI EE** Displays a dialog identifying the Oracle BI EE version and copyright information.
- **Sign Out** Signs you out of Oracle BI EE.
- **Alerts** Available only if one or more alerts have been generated for you. Displays the "Alerts dialog", where you can manage your alerts. An alert is a notification that is generated by an agent that delivers personalized and actionable content to specified recipients and to subscribers to the agent.
- Home Displays the Home page. For information about the Home page, see "What Is the Oracle BI EE Home Page?"
- Catalog Displays the "Catalog page", where you can locate objects in the catalog and perform tasks specific to those objects.
- Dashboards Contains links to all dashboards that are stored within the Dashboards sub-folder of the user's folder or any shared folder (note that dashboards not saved to the Dashboards sub-folders will not display from the global header's Dashboard list).
- **New** Displays a list of the objects that you can create. To create an object, select it from the list. The appropriate dialog or editor is displayed for you to create the object.
- **Open** Displays the following options:
  - Open Displays the "Open dialog", where you can select the object with which you want to work.
  - **Recent objects** Displays a list of the objects that you have recently viewed, created, or updated. You can use this list to select an object with which you want to work.
  - **Most Popular objects** Displays a list of the objects that are accessed the most often by the users that are assigned to the groups to which you belong. You can use this list to select an object with which you want to work.
- **Signed In As** *username* (where *username* is the user name that your current session is using) Displays the following options:

- My Account Displays the "My Account dialog", where you can specify your preferences, such as time zone, delivery devices, and delivery profile. For information about setting preferences, see "Setting Preferences".
- **Act As** Available only if your organization has enabled this functionality and you have been granted the appropriate permissions. Allows you to act as another user. For information, see "Acting for Other Users".

## Where Can I Get Help or More Information?

Oracle BI EE provides direct access to guides, context-sensitive help, and libraries that contain conceptual and procedural information to help you understand Oracle BI EE.

Specifically, you can access:

Oracle Business Intelligence Enterprise Edition Help — Each Oracle BI EE user interface page, tab, editor, pane, and dialog has a help topic associated with it. Each of these topics contains overview information, links to related concept and procedures, and an explanation of each component.

To access the online Help for a page, editor, tab, or dialog, click its **Help** button.

Alternatively, for a page, editor, or tab, you can select the xxx Help option (where xxx is the name of the page, editor, or tab) from the **Help** menu that is located in the global header. For example, for Help on the Catalog page, select the Catalog Page Help option. For more information about the global header, see "What Is the Oracle BI EE Global Header?"

Help Tables of Contents for Oracle BI EE, Oracle BI Publisher, and Marketing — Navigating through these Table of Contents is a good way to get acquainted with the products and quickly access a particular topic of interest.

To access one of these tables of contents, click the **Help Contents** option on the **Help** menu in the global header and then select the table of contents that you want.

Alternatively, you can click the **Help Contents** link in the Getting Started area on the Home page and then select the table of contents that you want. For information about the Home page, see "What Is the Oracle BI EE Home Page?"

Oracle Business Intelligence Enterprise Edition Documentation Library — The books in the Oracle BI EE documentation set are included in the Fusion Middleware Documentation Library on the Oracle Technology Network.

To access the Oracle BI EE documentation library, click the **Documentation** option on the **Help** menu in the global header.

Alternatively, you can click the **Oracle BI EE Documentation** link in the Getting Started area on the Home page.

You can also access the Fusion Middleware Documentation Library on the Oracle Technology Network at

http://www.oracle.com/technology/documentation/middleware.htm

**Online Technology Network (OTN)** — On OTN, you can find information that is specific to Oracle Business Intelligence as well as information about all other Oracle products. OTN provides services and resources to help developers, DBAs, and architects share and find expertise and best practices about how to design, build, deploy, manage, and optimize applications. Examples of the types of items that you will find on OTN include information about industry-standard

technologies such as JAVA and Linux, all Oracle product documentation, discussion forums, Oracle software, blogs and podcasts, and technical articles that are written by other OTN members.

To access OTN, click the **OTN** option on the **Help** menu in the global header.

Alternatively, you can click the **Oracle Technology Network** link in the Getting Started area on the Home page.

You can also access OTN at http://www.oracle.com/technology/tech/bi/index.html.

**Interactive Overview of Oracle BI EE** — To access the interactive overview of Oracle BI EE, click the Introduction to Oracle BI link in the Getting Started area on the Home page.

## **About Acting for Other Users**

The Act As functionality allows you to act for another user in Oracle BI EE. This functionality is useful, for example, when you need to work on another user's dashboard or content, or when IT support staff wants to troubleshoot another user's account.

To use the Act As functionality, the administrator must authorize you to act for another user. For information about authorizing users to act for others, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

When the administrator authorizes you to act for another user, the administrator can grant you full access or restricted access to another user's account:

- **Full access** When you are granted full access, you inherit the target user's privileges and can change the user's default dashboard and modify the user's content and preferences.
- **Restricted access** When you are granted restricted access, you maintain your user privileges, but inherit the target user's permission for viewing data. Restricted access enables you only to view the user's data.

You can view a list of the users with access to your account by opening the "My Account Dialog: Delegated Users tab". This tab displays a list of the names of the users that have been given access to your account.

For information on acting for another user, see "Acting for Other Users".

## **Acting for Other Users**

You can act for another user, if you have been authorized to do so. For more information, see "About Acting for Other Users".

#### To act as another user:

- 1. In the global header, click **Signed In As** *username*, then select **Act As**. The "Act As dialog" displays.
- 2. Select a user's ID from the list or enter the ID in the box (if available), and click OK.

The user's default dashboard is displayed. From this dashboard you can view or modify content, depending upon the access type (full or restricted) that you were granted by the administrator.

**3.** To return to your account, display the Act As dialog, click **Stop**, then click **OK**.

### **Setting Preferences**

You, as well as end users, can set personal preferences for Oracle BI EE. Using the "My Account dialog", and depending on your privileges, you can:

- View general account information, such as your display name and user ID.
- View and modify your preferences, such as language, time zone, and currency.
- View and modify your preferences for BI Publisher, such as location and time zone.
- View and modify your delivery options for agents. For information about delivery options, see "What Are Devices and Delivery Profiles?"
- View the roles and groups to which you belong.

#### To set preferences:

- 1. In the global header, click **Signed In As** *username* and select **My Account**. The "My Account dialog" is displayed.
- Complete the appropriate settings.
- Click **OK** to save your changes.

### How Does Oracle BI EE Interact with Other Products?

Oracle BI EE interacts in various ways with other products. This section contains the following topics:

- "Integration of Oracle BI EE with Oracle BI Publisher"
- "Integration of Oracle BI EE with Oracle Enterprise Performance Management System"
- "Interaction of Oracle BI EE with Oracle BI Applications"
- "Integration with Microsoft Office"

### Integration of Oracle BI EE with Oracle BI Publisher

**Note:** This guide assumes that Oracle BI EE and BI Publisher have been installed and configured to run as fully integrated components at your organization. If this is not the case, then some mentions of BI Publisher in this guide might not be applicable to you.

For information on running BI Publisher, see Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.

BI Publisher allows you to create highly formatted reports that are suitable for printing. BI Publisher reports are built on top of BI Publisher data models. A BI Publisher data model can consist of data sets from a wide range of sources, such as subject areas from the BI Server or analyses, SQL queries against relational databases, MDX queries against Essbase or other OLAP sources, LDAP, Web Services, Microsoft Excel, HTTP feeds, or XML files. BI Publisher supports a wide range of layout types, so you can create the full range of documents that your organization might need.

Within Oracle BI EE, you can view, create, edit, and schedule BI Publisher reports as well as include them in dashboard pages.

As part of Release 11g, Oracle BI EE includes a fully integrated BI Publisher. All the BI Publisher functionality appears seamlessly within the Oracle BI EE application, and all reports and related objects are created within Oracle BI EE and saved to the Oracle BI Presentation Catalog.

When using the integrated environment, you will notice that the following areas are affected by the integration:

- Editors You can create or edit BI Publisher content. When you work with a BI Publisher object, the appropriate BI Publisher editor is displayed. For example, when you work with a data model, the Data Model editor is displayed.
- Dashboards You can embed BI Publisher reports in dashboards. For information, see Chapter 4, "Building and Using Dashboards."
- Catalog The Oracle BI Presentation Catalog contains all BI Publisher objects, such as reports and templates. You can work with BI Publisher objects in the catalog just as you work with other catalog objects, such as analyses or filters.
- Security Single sign-on capability is provided. The Release 11g security model has been extended to include additional BI Publisher-specific permissions, such as xmlp\_template\_designer.

For more information about creating or scheduling a BI Publisher report, see Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.

### Integration of Oracle BI EE with Oracle Enterprise Performance Management System

Oracle BI EE offers the following integration with Oracle Enterprise Performance Management System:

- You can download Oracle Hyperion Smart View for Office from the Oracle BI EE Home page, as described in "Integration with Microsoft Office".
- You can navigate to Financial Reporting content by using a Navigate to EPM Content action. For information, see Chapter 10, "Working with Actions."

## Interaction of Oracle BI EE with Oracle BI Applications

Oracle Business Intelligence Applications are pre-built business intelligence solutions that are available for Oracle applications such as Oracle E-Business Suite, JD Edwards, Peoplesoft, and Siebel. Oracle Business Intelligence Applications are built on Oracle BI EE.

Oracle BI Applications consist of industry-specific dashboards and analyses that are built using industry best practices to address key functional areas within an organization. Dashboards and analyses are tailored for each end user's role in an organization.

Typically, Oracle BI Applications are integrated with and accessible from other operational applications, such as Oracle's Siebel CRM applications, to provide business metrics in analyses in the context of an organization's business function and industry. Oracle BI Applications include Extract Transform Load (ETL) routines to extract, transform, and load data into the Oracle Business Analytics Warehouse. Oracle BI Applications also contain metadata that maps to the Oracle Business Analytics Warehouse and a transactional database, and define key measures and metrics for all levels of the organization. These measures and metrics are available to content designers in Oracle Business Intelligence.

### Integration with Microsoft Office

Oracle BI EE offers a set of add-ins to Microsoft Office that can be downloaded and installed to enable integration between components of Oracle Business Intelligence and Microsoft Office. The Getting Started section of the Oracle BI EE "Home page" provides links to install the following add-in components:

- **Oracle Business Intelligence Add-in for Microsoft Office** This add-in for Microsoft Office enables you to access and run Oracle BI EE analyses directly within your Microsoft Office workspace. For information on installing and configuring the Oracle Business Intelligence Add-in for Microsoft Office, see Appendix D, "Integrating with Microsoft Office."
- **Template Builder for Word** This add-in for Microsoft Word facilitates the design of RTF templates for use in published reporting. For information, see "Creating an RTF Template Using the Template Builder for Word" in the *Oracle* Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.
- **Analyzer for Excel** This add-in for Microsoft Excel enables you to download the results of a report query to Excel and also to upload a spreadsheet to use as a report layout. For information, see "Using the BI Publisher Analyzer for Excel" in the Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.
- **Oracle Hyperion Smart View for Office** This add-in for Microsoft Office enables you to view, import, manipulate, distribute and share data in Microsoft Excel, Word and PowerPoint. For information on configuring to download Oracle Hyperion Smart View for Office, see "Configuring to Download Oracle Hyperion Smart View for Office" in the Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## **Topics of Interest in Other Guides**

Some topics that might be of interest to content designers and administrators are covered in other guides. Table 1–1 lists these topics, and indicates where to go for more information.

| Topic                    | Where to Go for More Information  |
|--------------------------|---|
| Installing Oracle BI EE  | Oracle Fusion Middleware Installation Guide for Oracle<br>Business Intelligence                                 |
| Configuring Oracle BI EE | Oracle Fusion Middleware System Administrator's<br>Guide for Oracle Business Intelligence Enterprise<br>Edition |
| Integrating Oracle BI EE | Oracle Fusion Middleware Integrator's Guide for<br>Oracle Business Intelligence Enterprise Edition              |

Table 1–1 Topics Covered in Other Guides

## System Requirements and Certification

Refer to the system requirements and certification documentation for information about hardware and software requirements, platforms, databases, and other information. Both of these documents are available on Oracle Technology Network (OTN).

The system requirements document covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches:

http://www.oracle.com/technology/software/products/ias/files/fus ion\_requirements.htm

The certification document covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products:

 $\verb|http://www.oracle.com/technology/software/products/ias/files/fus|\\$ ion\_certification.html

| S١ | stem | Rec | uirements | and | Certification |
|----|------|-----|-----------|-----|---------------|
|    |      |     |           |     |               |

# **Creating Analyses**

This chapter describes analyses and explains how to create them. It contains the following topics:

- "What Are Analyses?"
- "What Are Subject Areas and Columns?"
- "Understanding the Double Column Feature"
- "What Is the Analysis Editor?"
- "What Is the Process for Constructing Analyses?"
- "Creating New Analyses"
- "Specifying the Criteria for Analyses"
- "Displaying the Results of Analyses"
- "Adding Prompts to Analyses"
- "Examining the Logical SQL Statements for Analyses"
- "Saving Analyses"
- "Creating Agents from Analyses"
- "Editing Analyses"
- "About Embedding an Analysis in a Dashboard"
- "Working with Direct Database Requests"
- "Using Variables"
- "Where Can I Reference Variables?"
- "What Is the Syntax for Referencing Variables?"
- "What Predefined Presentation Variables Are Available?"
- "Example of Referencing a Variable in a Title View"

### What Are Analyses?

An analysis is a query against an organization's data that provides answers to business questions. A query contains the underlying SQL statements that are issued to the Oracle BI Server.

Analyses let you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can save, organize, and share the results of analyses.

Analyses that you create can be saved in the Oracle BI Presentation Catalog and integrated into any Oracle BI EE dashboard. Analyses can be enhanced through features such as graphs, result layout, calculated items, and drilling.

### **How Are Analyses Processed?**

When an analysis is processed, the request is sent in the form of logical SQL statements to the Oracle BI Server. The BI Server generates queries against the appropriate data sources. When the BI Server receives the query results, they are in a format that is not yet suitable for returning to the user. The BI Server merges the results and applies any additional calculations or filters that pertain to the results. The BI Server then sends the data to Oracle BI Presentation Services to format the results for display.

### **Embedding an Analysis in a Dashboard**

Embedding an analysis in a dashboard causes it to execute automatically and display the most current results every time the dashboard is accessed. This provides access to the most current results. For example, if you are a sales executive whose company captures sales data on a daily basis, then you might want to have the dollar volume of product that was sold today be displayed on the front page of your dashboard.

You can embed saved analyses by using the Dashboard editor. For information about the Dashboard editor, see "Adding Content to Dashboards".

## What Are Subject Areas and Columns?

A subject area contains folders, measure columns, attribute columns, hierarchical columns, and hierarchy levels that represent information about the areas of an organization's business or about groups of users with an organization. Subject areas usually have names that correspond to the types of information that they contain, such as Marketing Contracts, Service Requests, and Orders.

A subject area corresponds to the presentation layer in an Oracle BI metadata repository. In a repository, the subject area is the highest-level object in the presentation layer and represents the view of the data that end users see when they create or edit an analyses.

Individuals who design and build metadata repositories (such as a Business Intelligence strategist, metadata provider, or ETL developer) create subject areas using the Oracle BI Administration Tool. Generally, rather than creating one large subject area for their company's data, they create multiple smaller subject areas. This enables them to provide a particular group of users or a particular area of a company with the most important data that they need in one small subject area and the less important data in one or more related subject areas created from the same business model layer. Having these smaller subject areas makes it easier for users to find the data they need. It also makes it easier to maintain the data. For more information on creating subject areas, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.

Columns contain the individual pieces of data that an analysis will return. Columns usually have names that indicate the types of information that they contain, such as Account or Contact. Together with filters and selection steps, columns determine what data an analysis will contain.

When you create a new analysis, filter, or dashboard prompt, you first select the subject area with which you want to work. This is known as the primary subject area and is displayed in the "Subject Areas pane". If, as you work, you find that you need more data, you can add additional subjects areas that are related to the primary subject area that you have chosen. (You can add related subject areas only if they are available for the primary subject area and only if you have permission to access them.)

For an analysis to return data, you must select at least one column to include in the analysis.

### What Are the Types of Columns?

Subject areas contain the following types of columns:

- **Attribute Column** Holds a flat list of values that are also known as members. No hierarchical relationship exists between these members, as is the case for members of a hierarchical column. An attribute column was referred to as a presentation column in previous releases.
  - Examples include ProductID or City.
- Hierarchical Column Holds data values that are organized using both named levels and parent-child relationships. This column is displayed using a tree-like structure. Individual members are shown in an outline manner. Hierarchies allow you to drill deeper into the data, to view more detailed information. Examples include Time or Geography. The following image shows the Time and Fiscal Time hierarchies in the Subject Areas pane.

| □ \undersignater Time Hierarchy |
|---------------------------------|
| ☐ Total Time                    |
| └─ Year                         |
| └─ Quarter                      |
| └─ Month                        |
| └─ Week                         |
| └─ Day                          |
| ☐ 🧣 Fiscal Time Hierarchy       |
| Total Fiscal Time               |
| └□ Day                          |

A hierarchical column can be one of the following kinds:

- **Level-based hierarchy** Consists of an ordered set of two or more levels. For example, a Time hierarchy might have three levels for Year, Quarter, and Month. Level-based hierarchies can also contain parent-child relationships.
- **Parent-child hierarchy** Consists of values that define the hierarchy in a parent-child relationship and does not contain named levels. For example, an Employee hierarchy might have no levels, but instead have names of employees who are managed by other employees. Employees can have titles, such as Vice President. Vice Presidents might report to other Vice Presidents and different Vice Presidents can be at different depths in the hierarchy.

In addition to being level-based or parent-child, hierarchical columns can be one of the following:

**Ragged** — A hierarchy in which all the lowest-level members do not have the same depth. For example, a Time hierarchy might have data for the current month at the day level, the previous month's data at the month level, and the previous 5 years' data at the quarter level. This type of hierarchy is also known as an unbalanced hierarchy.

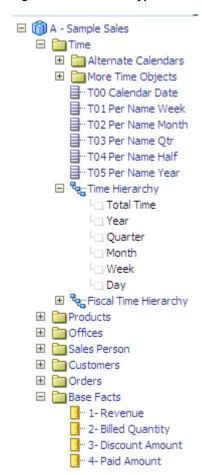
- **Skip-level** A hierarchy in which certain members do not have values for certain higher levels. For example, in the United States, the city of Washington in the District of Columbia does not belong to a state. The expectation is that users can still navigate from the country level (United States) to Washington and below without the need for a state.
- **Measure Column** Holds a simple list of data values. It is a column in an Oracle BI EE repository, usually in a fact table, that can change for each record and can be added up or aggregated in some way. Examples include Revenue or Units Sold.

Throughout this guide, the term "column" on its own generally refers to all three types. Names for specific types of columns are included where necessary.

### **How Are Columns Indicated Visually?**

Each type of column is indicated by its own icon in places such as the Subject Areas pane and Layout pane. You can expand level-based hierarchies and see their levels. Parent-child hierarchies are shown as hierarchical columns that have no levels. Figure 2–1 shows the icons and names of various columns.

Figure 2–1 Column Types With Their Icons



### How Will Measure Columns Created in Previous Releases Be Upgraded?

In previous releases of Oracle BI EE, measure columns could easily be treated as attribute columns, which allowed you to move them freely among the edges of views. This release introduces functionality that specifies to not show all the detail when a

measure column is moved to an edge but rather to aggregate the measure column to the grain of the edge. During upgrade, all measure columns will have the Treat as an Attribute Column box selected in the "Edit Column Formula dialog: Column Formula tab".

### **Understanding the Double Column Feature**

Oracle BI EE provides a feature called double columns. When a repository is configured for the double column feature, column data includes a display column that has a code column mapped to it (that is, it has double columns). A **display column** contains the display values for the column data, for example, Excellent, Good, and Poor. A code column contains code values that uniquely identify display values and are consistent across users or locales, for example, the code values 1 (uniquely identifying Excellent), 2 (uniquely identifying Good), and 3 (uniquely identifying Poor).

When Oracle BI EE processes a double column, for example, as part of the criteria of an analysis or as the basis for a filter, it generates and issues SQL statements to the Oracle BI Server that use code values rather than display values, thereby making the filter language independent.

The double column feature lets you:

- Build internationalized analyses that are automatically filtered by language independent codes. (In previous releases, filters were not language independent.) For example, you can build one filtered analysis that can be used by both French-language users and English-language users.
- Build common analyses that can be shared among groups even if the groups require different display values. For example, you can build a common analysis that displays for a Status field the values Excellent, Good, and Poor to one group, and Superb, Okay, and Bad to another group.
- Change display values without breaking existing analyses. For example, suppose that you have an analysis that is filtered on the display value Excellent. If it is a double column, then the filtering will be performed on its code column with the code value for "Excellent" rather than the display value of "Excellent." This means that you can change the display value Excellent to Superb without breaking the existing analysis.

In addition, if your organization allows the display of code values within Oracle BI EE, you can use code values rather than the display values in some dialogs, such as the "New Filter dialog". This means, for example, when specifying the values to use when applying a filter, you can specify code values rather than display values.

Before you can take advantage of the double column feature, your administrator must configure your repository by mapping code columns to display columns. Check with the administrator to see if your repository is configured for double columns.

### What Is the Analysis Editor?

The "Analysis editor" lets you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can include the views that you create in an analysis for display in dashboards.

The Analysis editor contains the following tabs:

Criteria tab — Lets you specify the criteria for an analysis, including columns, and filters. You can specify the order in which the results should be returned,

formatting (such as headings, number of decimal places, styles such as fonts and colors, and conditional formatting), and column formulas (such as adding a Rank or Percentile function).

- **Results tab** Lets you create different views of the analysis results such as graphs, tickers, and pivot tables. You can also add or modify selection steps.
- **Prompts tab** Lets you create prompts that allow users to select values to filter an analysis or analyses on a dashboard. Prompts allow users to select values that dynamically filter all views within the analysis or analyses. You can also create prompts for use with selection steps, both for member selection steps and qualifying condition steps.
- Advanced tab Lets you edit XML code and examine the logical SQL statement that was generated for an analysis. You can use the existing SQL statement as the basis for creating a new analysis.

The tabs of the Analysis editor are organized into various panes and areas. As you work, you will want to manage these panes to suit your needs. See "Managing Panes in the Analysis Editor Tabs".

You access the Analysis editor when you create (or edit) an analysis. See "Creating New Analyses".

### Managing Panes in the Analysis Editor Tabs

Each of the tabs in the Analysis editor consists of a number of panes. For example, the Results tab consists of the "Subject Areas pane", the "Catalog pane", the "Views pane", the "Compound Layout", and the "Selection Steps pane".

As you work, you will want to manage these panes to give yourself the most efficient work area for the task that you are performing. For example, if you add multiple views to the compound layout on the Results tab, then you might want to hide the other panes in the Results tab to maximize the area in which to see the views that you are adding. You can:

- Show or hide the panes that are displayed on the left side of the Analysis editor by clicking the sideways triangle button that is displayed between the left and right
- Expand or collapse an individual pane by clicking the plus or minus button in the title bar of the pane.
- Resize an expanded pane by dragging its splitter. For example, you can drag the splitter on top of the Catalog pane up to increase the height of the pane.
- Show or hide a pane by clicking its show/hide toolbar button, if one is available for the pane in the toolbar. For example, you can show or hide the Filters pane in the Criteria tab by clicking the **Show/Hide Filters pane** button in the toolbar.

## What Is the Process for Constructing Analyses?

The process for constructing an analysis includes the following steps:

- "Creating New Analyses"
- "Specifying the Criteria for Analyses"
- "Displaying the Results of Analyses"
- "Adding Prompts to Analyses"

- "Examining the Logical SQL Statements for Analyses"
- "Saving Analyses"

## **Creating New Analyses**

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

#### To create a new analysis:

- In the global header, click **New**, then **Analysis**, then one of the following options:
  - Select a subject area.

The Analysis editor is displayed. You can now specify the criteria for the analysis. See "Specifying the Criteria for Analyses".

Create Direct Database Request.

For information, see "Working with Direct Database Requests".

Create Analysis from Simple SQL.

The "Analysis Simple SQL Statement dialog" is displayed in which you enter SQL statements for creating an analysis. The results of the analysis can be displayed and manipulated within the Analysis editor, and subsequently incorporated into dashboards and agents.

## Specifying the Criteria for Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Criteria tab" to specify the criteria for an analysis, including columns, filters, and selection steps. You also can specify:

- The default order in which columns are to be displayed in the analysis results
- The default sorting for the values that are displayed in views
- The default formatting (such as headings, number of decimal places, conditional formats, and system-wide defaults)
- Column formulas (such as adding a Rank or Percentile function)
- The aggregation rules for column totals

#### To specify the criteria for an analysis:

- In the Criteria tab, select the columns to be included in the analysis by doing one of the following:
  - Double-clicking the columns in the "Subject Areas pane".
  - Dragging and dropping the columns from the Subject Areas pane to the "Selected Columns pane".

#### To select:

- Multiple contiguous columns, press and hold the Shift + Ctrl keys, then click each column that you want.
- Multiple non-contiguous columns, press and hold the Ctrl key, then click each column that you want.

**Note:** In general, the analysis should contain at least one measure column. Measure columns are the key additive measurements of business performance, such as dollar sales per store, or the number of service requests opened and closed each day. An analysis without any measure columns generally is not meaningful, and can cause poor query performance or unexpected results. If you want to build an analysis without any measure columns, then first consult the administrator.

The selected columns are displayed in a box in the Selected Columns pane. Each column box has two sections. The upper section shows the name of the folder that contains the column, for example, Customers. The lower section shows the name of the column, for example, Customer Name.

#### If you want to:

- Add or remove related subject areas from which to select columns, click the Add/Remove Subject Areas toolbar button in the Subject Areas pane to display the "Add/Remove Subject Areas dialog".
  - If you add a related subject area but do not add any columns from that subject area to the analysis, then the subject area is not related to the analysis after you close and re-open the analysis.
- Refresh the content in the Subject Areas pane, click the **Refresh** toolbar button on the Subject Areas pane or click the arrow beside the button.
  - Clicking the button executes the default behavior of **Refresh Display**. Clicking the arrow allows you to select Refresh Display or Reload Server Metadata to refresh the subject area's metadata.
  - For more information about these options, see the "Subject Areas pane".
- 2. Modify the columns or levels of hierarchical columns as needed using the Selected Columns pane:
  - Click the **Options** button to the right of a column name in the Selected Columns pane to display options to:
    - Specify the sort order for columns. (You cannot specify the sort order for hierarchy levels.)
      - For more information, see "Sorting Data in Views".
    - Edit formulas for attribute columns and measure columns, including customizing headings, and specifying the aggregation rule. (You cannot customize headings, specify the aggregation rule, or edit the formulas for hierarchical columns or for hierarchy levels.)
      - For more information, see "Editing the Formula for a Column".
    - Edit column properties to control the formatting and interaction of columns and hierarchy levels.
      - For more information on applying formatting, see "Applying Formatting to a Column".
    - Add filters for attribute columns and measure columns. (You cannot add filters for hierarchical columns or hierarchy levels.) For more information, see "Creating or Editing Column Filters".
    - Delete the columns from the analysis. (You cannot delete hierarchy levels.)

- Click the **Remove all columns from criteria** toolbar button in the Selected Columns pane to remove all columns from the analysis.
- Click the Combine results based on union, intersection, and difference **operations** toolbar button in the Selected Columns pane to combine the results of two or more analyses into a single result. For more information, see "Combining Columns Using Set Operations".
- Use the **Drag Column** buttons in the Selected Columns pane to place the columns in the default order that you want them to be displayed in the analysis results.
- **3.** Add and edit inline filters as needed using the "Filters pane". For more information, see "Creating or Editing Column Filters".
- **4.** Create or edit selection steps as needed using the "Selection Steps pane". For more information, see "Working with Selections of Data".
- **5.** Add named filters, calculated items, and groups from the Oracle BI Presentation Catalog as needed using the "Catalog pane".
- 6. Use the buttons on the toolbar for the Criteria tab, as needed, to show or hide the Filters pane, to show or hide the Selections Steps pane, and to edit the properties of the analysis, such as the type of message (default or custom) to be displayed if no results are available.

You can now add views to the analysis. See "Displaying the Results of Analyses".

### Editing the Formula for a Column

You can edit the formulas for attribute columns and measure columns when you specify the criteria for an analysis. This editing affects the column only in the context of the analysis and does not modify the formula of the original column in the subject area. You can also customize table and column headings and specify the aggregation rule for column totals. (This functionality is not available for hierarchical columns.)

A column formula specifies what the column values represent. In its most basic form, such as "Sales Measures". "Dollars", a column takes the data from the data source as is. You can edit the formula to add functions, conditional expressions, and so on. This allows you to present analysis results in a variety of ways. For example, suppose you wanted to do some what-if analysis and show what the sales dollars would be by region if you increased them by 10%. You can do this by changing the formula for the Dollars column to show the sales dollars increased by 10%. Figure 2–2 shows an analysis that shows the Dollars column (which shows the sales dollars in your data source) and the Dollars Increased by 10% column, where the formula for the Dollars column was edited to show sale dollars increased by 10%.

Figure 2–2 Analysis Showing Dollars and Dollars Increased by 10%

| Region          | Dollars      | Dollars Increased By 10% |
|-----------------|--------------|--------------------------|
| CENTRAL REGION  | 143290854.00 | 157619939.40             |
| EASTERN REGION  | 280403304.00 | 308443634.40             |
| SOUTHERN REGION | 147722434.00 | 162494677.40             |
| WESTERN REGION  | 205550830.00 | 226105913.00             |
| Grand Total     | 143290854.00 | 157619939.40             |

To edit the formula of a column:

- 1. In the "Selected Columns pane", click the **Options** button beside the column whose formula you want to edit and select Edit Formula. The "Edit Column Formula dialog" is displayed.
- 2. Use the "Edit Column Formula dialog: Column Formula tab" to perform various tasks such as creating customized headers and creating or editing the formula for the column. You can build a simple mathematical formula using operator and character buttons, such as "Sales Measures". "Dollars" \*1.10.
- 3. Optionally, use the "Edit Column Formula dialog: Bins tab" to combine values for the column into sets.
- Click OK.

The column formula is saved with the analysis with which it is used.

#### Related Topics

"What Are Analyses?" "Specifying the Criteria for Analyses"

### **Combining Columns Using Set Operations**

After you have selected a subject area for an analysis, you can combine columns from one or more subject areas using Set operations such as Union or Intersect. By combining columns, you create a new column for displaying the data in a different

#### Guidelines for Selecting Columns to Combine

When selecting columns to combine, keep the following guidelines in mind:

- The number and data types of the columns to combine must be the same. The number of rows that are returned for each column can differ.
- You can select columns from the same subject area or from a different subject area, but the columns must have some commonality.
- You can specify one Set operation for one collection of criteria. For example, if you create criteria from the Paint subject area, you can apply only one Set operation to those columns. You cannot apply different Set operations to different columns in the collection of criteria.
- You cannot use hierarchical columns, selection steps, or groups when you combine

### Difference Between Combining Columns Using Set Operations and Adding **Columns from Related Subject Areas**

Combining columns using Set operations produces different results than adding columns from related subject areas:

- When you combine columns using Set operations, the analysis results show a single newly combined column governed by a Set operation. For example, see "Example: Combining Columns from One Subject Area".
- When you add columns from related subject areas to an analysis, the results show each added column individually. For example, if you have the appropriate permissions, then you can create an analysis by selecting one column from a primary subject area and selecting another column from a related subject area.

For information, see "What Are Subject Areas and Columns?"

### **Example: Combining Columns from One Subject Area**

The Paint subject area contains the Markets folder, which contains the District and Market columns. You can combine these two columns and create a new column called Districts & Markets. You can include the Union All Set operation to specify that this new column shows all the values from both columns in a single column in a table.

#### Combining Columns from One or More Subject Areas

The following procedure describes how to combine columns from one or more subject areas. Some steps include references to the example of creating the Districts & Markets column with the Paint subject area.

#### To combine columns from one or more subject areas:

- In the Analysis editor, create an empty analysis that uses a subject area such as Paint.
- 2. In the Criteria tab, select the columns to include in the analysis. For example, select District from the Markets folder and Dollars from the Sales Measures folder.
- 3. In the "Selected Columns pane", click the Combine results based on union, intersection, and difference operations toolbar button to display the Select Subject Area menu.
- 4. Select a subject area that contains the columns that you want to combine with the columns that you have already included. For example, click Paint.
  - The Set Operations area is displayed in the Selected Columns pane. Note the boxes with dotted line borders that are displayed below the criteria. These boxes indicate the kind of column that you must combine with those that you have already included. For example, the boxes might include "Add Column (District)" and "Add Column (Dollars)". This indicates that the columns that you include in each of those boxes will be combined with the previously selected District and Dollars columns using a Set operation to form a new column. When you combine measure columns, no arithmetic operations are performed.
- 5. In the Subject Areas pane, select the columns that will be combined with the originally selected columns. For example, from the Markets folder, select Market and from the Sales Measures folder, select Dollars.
  - Note that the boxes that previously had dotted line borders now hold the columns that you have just selected. You have now specified the columns that you want to combine.
- Click the **Union** button under the **Result Columns** link. Select the operation type to use for combining the columns. For example, select the **Union All** type.
  - The result columns are those that are displayed in views after applying the set operation of the derived columns.
- 7. Click the **Result Columns** link. Note that the Selected Columns pane is updated to show the newly combined columns that you have just created. You can work with these columns as you do other columns in this pane. For example, you can rename the first column (that is the single newly combined column) by following these steps:
  - Click the **Options** button for the District column.
  - Select Column Properties.
  - Select Column Format.
  - **d.** Ensure that **Custom Headings** is selected.

- **e.** In the **Column Heading** box, enter Districts and Markets.
- Click OK.
- Click the Results tab to view the columns in a table in the "Compound Layout".

### Viewing Metadata Information from the Subject Areas Pane

You can view metadata information for subject areas, folders, columns, and hierarchy levels. This is helpful, for example, if you need a full description of one of these objects when creating an analysis.

Metadata information is contained in a metadata dictionary. A metadata dictionary is a static set of XML documents. Each XML document describes a metadata object, such as a column, including its properties and relationships with other metadata objects.

**Note:** In order for you to view metadata information, the administrator must have performed various configuration tasks, as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

#### To view metadata information:

- In the Subject Areas pane in the Criteria tab or the Results tab, select the subject area, folder, column, or hierarchy level for which you want to view metadata information.
- 2. Click View Metadata Dictionary in the toolbar.

The metadata dictionary information for the object is displayed either in a new browser window or in a tab, depending on the browser setting.

**Note:** If the metadata dictionary information does not display in the browser, then ensure that the browser setting to access data sources across domains is enabled.

## Displaying the Results of Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Results tab" to add different views of the results such as graphs, tickers, and pivot tables. For a list of the views that you can add, see "What Types of Views Are Available?"

When you create an analysis and display the Results tab, you see in the "Compound Layout" a title view and either a table or pivot table view by default, based on the following:

- If the analysis contains only attribute columns and measure columns, then a table is displayed by default.
- If the analysis contains at least one hierarchical column, then a pivot table is displayed by default.

The administrator might have configured different views to display by default in the Results tab.

You can combine views and position them anywhere in the Compound Layout. For example, you can create side-by-side pivot tables that reflect different views of the data, graphs that allow you to explore interrelationships in depth, and filters that limit the results.

Together all of these views are called a compound layout. You can create additional compound layouts, as described in "Creating Additional Compound Layouts".

#### To display the results of an analysis:

- 1. Click the Results tab.
  - The results of the analysis are displayed in a table or pivot table.
- (Optional) Edit the table or pivot table or add additional views. For more information, see "Adding Views for Display in Dashboards".

### Creating Additional Compound Layouts

As you work with an analysis, you can create multiple compound layouts that use different combinations of views. For example, one layout might include a graph and a title, and another layout might include a graph and a narrative view. When you add the analysis to a dashboard page, you can select which layout you want to include on that page.

#### To create additional compound layouts:

- Click the "Analysis editor: Results tab".
- Create another compound layout in the "Compound Layout" by clicking one of the following buttons on the toolbar of the Results tab:
  - **Create Compound Layout** Creates a new instance of the compound layout.
  - **Duplicate Compound Layout** Creates a copy of the current compound layout, with the same views.

### Alerting Users to No Data in the Results of Analyses

When the results of an analysis return no data, the following default message is displayed to users:

```
No Results
```

The specified criteria didn't result in any data. This is often caused by applying filters and/or selections that are too restrictive or that contain incorrect values. Please check your Analysis Filters and try again. The filters currently being applied are shown below.

Rather than display the default message, you can create a customized message to alert users. This allows you to provide your own explanation as to why the analysis returned no data.

#### To create a custom message to alert users to no data in the results of an analysis:

- Edit the analysis to which you want to add a custom message.
- Click the "Analysis editor: Results tab".
- Click the **Analysis Properties** toolbar button. The "Analysis Properties dialog" is displayed.
- In the No Results Settings box, select Display Custom Message.

- **5.** In the **Header** field, enter the text of the header for the custom message.
- In the **Message** field, enter the explanatory text.
- 7. Click OK.

## Adding Prompts to Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Prompts tab" to create prompts that allow users to select values to filter an analysis. Prompts allow users to select values that dynamically filter all views within the analysis.

#### To add a prompt to an analysis:

- Click the Prompts tab.
- Add the prompt, as described in Chapter 6, "Prompting in Dashboards and Analyses."

## **Examining the Logical SQL Statements for Analyses**

This procedure is an advanced step in the process for constructing an analysis. For information, see "What Is the Process for Constructing Analyses?"

You use the "Analysis editor: Advanced tab" to examine the XML code and logical SQL statement that is generated for an analysis and optionally create a new analysis based on that SQL statement. Generally you need not use the features of this tab, because the vast majority of functionality for working with analyses is provided through the user interface. The following list provides examples of situations in which you might want to examine SOL statements:

You can use the Prefix section to override any user variable or session variable that has been marked as available for updating. You can specify multiple variables to update with one line of code.

To override variables, use the following syntax:

```
SET VARIABLE var-name=value
```

For example, you can set the variables that are shown in the following code line:

```
SET VARIABLE "My Variable"=4, DISABLE CACTHE HIT = 1,
LOGLEVEL = 2;
```

For information on variables, see "Where Can I Reference Variables?"

You can temporarily change the logging level for an analysis for troubleshooting, even when logging is turned off for analyses. In the Prefix section of the Advanced tab, you can specify the following:

```
SET VARIABLE LOGLEVEL=4;
```

This specification runs the analysis at level 4, which facilitates advanced troubleshooting. The default level is 0, which indicates no logging. You can view the logs using the **View Log** link on the "Administration: Manage Sessions page".

See Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business *Intelligence Enterprise Edition* for information on logging levels.

You can enter your own logical SQL statements. Entering your own statements eliminates many features of Oracle BI EE (such as hierarchical columns, selection

- steps, groups, and formatting), but allows you to use functions such as SET operations.
- You can create a new analysis using the SQL statements from an existing analysis as your starting point.

Before working with the Advanced tab, keep the following important points in mind:

- This procedure is only for advanced users and developers that have the appropriate responsibilities to access the Advanced tab. It is assumed that you understand advanced SQL statements, have expertise working with the Oracle BI Server metadata, are familiar with the SQL information in Appendix A, "Logical SQL Reference", and understand the content and structure of the underlying data sources.
- This tab provides the Advanced SQL Clauses area, which allows you to add clauses to the SQL statements and other similarly advanced features. These features, with the exception of the ability to specify a prefix, are disabled for analyses that contain hierarchical columns, member selections, or groups.
- The links at the top of the tab allow you to download analysis results into Microsoft Excel. You might be unable to download analysis results based on the security features that have been configured at your organization. For information, contact your administrator.

**Note:** You can see the logical SQL statement that an analysis is using by inserting a logical SQL view. You can also enter SQL statements using the "Administration: Issue SQL page".

#### To edit the XML code or examine the SQL statement that is generated for an analysis:

- Click the "Analysis editor: Advanced tab".
- Use the links that correspond to the analysis name in the Referencing the Results area at the top of the tab to:
  - Display pages that contain links for working with the results of the analysis.
  - Download a file for working with the results of the analysis in Excel. For information, see "Integrating an Analysis with Microsoft Excel's Internet Query Feature".
- Use the fields in the Analysis XML area to view and modify the XML code, and click **Apply XML**.
  - If you modify the XML code, then you affect the analysis as it is saved in the Oracle BI Presentation Catalog.
- Use the read-only box in the SQL Issued area to examine the SQL statement that will be sent to the Oracle BI Server when the analysis is executed.
  - If you want to create a new analysis using the SQL statement from the current analysis as the starting point, then click the New Analysis button. Any hierarchical columns, selection steps, groups, or formatting that are specified in the current analysis will be removed.
- 5. Depending on the content of the analysis, use the available fields in the Advanced SQL Clauses area to change the subject area, add GROUP BY or HAVING clauses, and specify DISTINCT processing and a prefix. Click Apply SQL to activate your changes.

**Note:** Use care when clicking the **Apply SQL** button. When you do, Oracle BI EE creates a new analysis based on the SQL statement that you have added or modified. Therefore, you will lose all views, formatting, and so on that you had previously created for the analysis. The XML code will also be modified for the new analysis.

### Integrating an Analysis with Microsoft Excel's Internet Query Feature

Integrating an analysis with Excel's Internet Query (IQY) feature enables you to run the analysis from within Excel. This feature can be useful for printing and distributing analyses. You can integrate analyses into Excel's IQY feature only with results that are displayed in one or more table or pivot table views. Other view types are not supported.

When the IQY file is opened in Excel, you are prompted to enter your Oracle Business Intelligence user ID and password. (You must have a nonblank password.) Then, the results of the saved analysis are retrieved and placed in an Excel spreadsheet. You can save the Excel spreadsheet so that the data can be refreshed directly from within Excel.

**Note:** You might not be able to download results into an Excel spreadsheet if your company is using certain security features. For more information, contact the administrator.

By default, Excel prompts you to enter your user ID and password each time that the query is refreshed. Alternatively, you can save your user ID and password within the spreadsheet. Consult your Excel documentation for details.

#### To integrate an analysis with Excel's IQY feature:

- Save an analysis with one or more table or pivot table views.
- In the "Analysis editor: Advanced tab", click the link to generate and download a Web Query file.
- Save the file to the desired location.

After opening the file in Excel, you can modify it, specify additional formatting, enhance it with graphs, and so on. For information, see your Excel documentation.

### Saving Analyses

This procedure is a step in the process for constructing an analysis. For more information, see "What Is the Process for Constructing Analyses?"

You can save an analysis to a:

- Personal folder, from which only you can access it.
  - Your top-level personal folder is called My Folders. Every user with a unique user name has a folder called My Folders. This is designed to hold the analyses that you run most often, and other content that you access frequently.
  - When you click the **Refresh Display** link at the bottom of the pane, the analysis is listed under the folder in which you saved it.
- Shared folder, from which users with permission to access that folder can access it.
- Lotus Notes database by either:

- Saving the analysis to a Web archive file (file extension .mht), and then uploading the file to the Lotus Notes database.
- Saving the analysis and scheduling it to be sent by e-mail automatically to a specific address on a Lotus Notes server using an agent. The Lotus Notes server can then process the e-mail and write it to the database.

#### To save an analysis:

- 1. In the Analysis editor, click the Save Analysis toolbar button to display the dialog to save the analysis.
- **2.** If you want to save the analysis to a personal or shared folder:
  - **a.** In the **Save In** box, select the personal or shared folder in which to save the analysis.
  - **b.** In the **Name** field, enter a name for the analysis, such as forecasted sales.
  - Click **OK**.
- **3.** If you want to save the analysis to a Lotus Notes database using a Web Archive
  - In the **Save In** box, select the folder in which to save the analysis.
  - In the **Name** field, enter a name for the analysis, including an .mht file extension, such as forecasted\_sales.mht.
  - c. Click OK.
  - Upload the .mht file to the Lotus Notes database.
- **4.** If you want to save the analysis to a Lotus Notes database using an agent:
  - **a.** In the **Save In** box, select the folder in which to save the analysis.
  - **b.** In the **Name** field, enter a name for the analysis, such as forecasted\_sales.
  - c. Click OK.
  - **d.** Create the agent, scheduling it to be sent by e-mail to a specific address on a Lotus Notes server.

For more information on creating an agent, see "Creating Agents".

### **Creating Agents from Analyses**

You can create an agent directly from an analysis. When you create an agent using this method, Oracle BI EE does the following:

- Creates a condition based on the analysis and adds the condition to the "Agent editor: Condition tab"
- Adds the analysis as the content delivery on the "Agent editor: Delivery Content tab"

For more information on agents, see Chapter 8, "Delivering Content."

#### To create an agent from an analysis:

- Locate the analysis from which you want to create an agent using one of the following methods:
  - Open the analysis, click the "Analysis editor: Results tab" and then the Schedule toolbar button.

The analysis is saved and then the "Agent editor" is displayed.

Navigate to the analysis on the "Catalog page", click the **More** list, and then click the **Schedule** option.

The "Agent editor" is displayed.

- Complete the following tabs of the Agent editor:
  - "Agent editor: General tab"
  - "Agent editor: Schedule tab"
  - "Agent editor: Condition tab"
  - "Agent editor: Delivery Content tab"
  - "Agent editor: Recipients tab"
  - "Agent editor: Destinations tab"
  - "Agent editor: Actions tab"
- Save the agent.

## **Editing Analyses**

#### To edit an analysis:

- 1. In the global header, click **Catalog** to display the "Catalog page".
- Navigate to the analysis that you want to edit and click the Edit link. The analysis is displayed in the "Analysis editor".
- **3.** Make the desired changes.
- **4.** Save the analysis.

### Editing Upgraded Analyses that Contain "Advanced SQL"

In previous releases, advanced users could edit the SQL statements for analyses using the Advanced tab. In this release, you can continue to use the "Analysis editor: Advanced tab" for this purpose, provided that the analysis does not contain features such as hierarchical columns, selections, or groups.

If you have upgraded an analysis whose SQL statement was edited on the Advanced tab in a previous release, then you cannot add any hierarchical columns, selections, or groups to that analysis. If you try to include any of these features in such an upgraded analyses, then you will see a message that states that the feature is unavailable.

For more information, see "Examining the Logical SQL Statements for Analyses".

### About Embedding an Analysis in a Dashboard

Embedding an analysis in a dashboard causes it to execute automatically and display the results within the dashboard. This provides access to current results. For example, if you are a sales executive whose company captures sales data on a daily basis, then you might want to have the dollar volume of product that was sold today be displayed on the front page of your dashboard.

You can embed previously created analyses from the Oracle BI Presentation Catalog by using the Dashboard editor. For information about the Dashboard editor, see "Adding Content to Dashboards".

## **Working with Direct Database Requests**

Users with the appropriate privileges can create and issue a direct database request directly to a physical back-end database. The results of the request can be displayed and manipulated within the Analysis editor, and subsequently incorporated into dashboards and agents. This section includes the following topics:

- "Setting Privileges for Direct Requests"
- "Executing a Direct Database Request"
- "Seeing the Results of Direct Database Requests"

### Setting Privileges for Direct Requests

The following privilege settings in Oracle BI Presentation Services Administration control whether you can modify and execute direct requests:

- **Edit Direct Database Requests** If this privilege is set for you, then you can create and edit direct database requests.
- **Execute Direct Database Requests** If this permission is set for you, then you can issue direct requests and see the results.

See Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence *Enterprise Edition* for information on privileges.

### **Executing a Direct Database Request**

You can send a direct request to the database from Oracle BI EE.

**Note:** Oracle BI Server security rules for data are bypassed and cannot be applied when direct database requests are issued from Oracle BI EE.

#### To execute a direct database request:

In the global header, select New, then Analysis, then Create Direct Database Request.

The "Analysis editor: Criteria tab" is displayed with options for creating a database request.

- Specify the appropriate options on the Criteria tab.
- To issue the request and see the results, if any, click the Results tab.

### Seeing the Results of Direct Database Requests

After you retrieve columns to create an analysis from a direct database request, you can work with that analysis similarly to how you work with other analyses. The following list outlines differences with analyses whose columns originated from direct database requests:

The "Subject Areas pane" will not contain any columns, because you are not working with columns from a repository.

- You cannot create groups or selection steps for this analysis.
- You cannot specify conditional formatting for the columns.

### **Using Variables**

You can reference variables in a number of areas of Oracle BI Enterprise Edition, including in analyses, dashboards, KPIs, actions, agents, and conditions. For example, suppose that you wanted to create an analysis whose title displays the current user's name. You can do this by referencing a variable.

There are four types of variables that you can use:

- Session
- Repository
- Presentation
- Request

#### What Are Session Variables?

A session variable is a variable that is initialized at login time for each user. When a user begins a session, the Oracle BI Server creates a new instance of a session variable and initializes it.

There are as many instances of a session variable as there are active sessions on the Oracle BI Server. Each instance of a session variable could be initialized to a different value.

There are two types of session variables:

- **System** A session variable that the Oracle BI Server and Oracle BI Presentation Services use for specific purposes.
  - System session variables have reserved names that cannot be used for other kinds of variables (such as static or dynamic repository variables and non-system session variables).
- **Non-system** A system variable that the administrator creates and names. For example, the administrator might create a SalesRegion non-system variable that initializes the name of a user's sales region.

The administrator creates non-system session variables using the Oracle BI Administration Tool.

For more information on session variables, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.

### What Are Repository Variables?

A repository variable is a variable that has a single value at any point in time.

There are two types of repository variables:

- Static Repository variables whose value persist and do not change until the administrator decides to change them.
- **Dynamic** Repository variables whose values are refreshed by data returned from queries.

The administrator creates repository variables using the Oracle BI Administration

For more information on repository variables, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.

#### What Are Presentation Variables?

A presentation variable is a variable that you can create as part of the process of creating one of the following types of dashboard prompts:

**Column prompt** — A presentation variable created as part of a column prompt is associated with a column, and the values that it can take come from the column values.

To create a presentation variable as part of a column prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select Presentation Variable in the Set a variable field and then enter a name for the variable in the Variable Name

For information on working with column prompts, see "Creating or Editing a Column Prompt".

**Variable prompt** — A presentation variable created as part of a variable prompt is not associated with any column, and you define the values that it can take.

To create a presentation variable as part of a variable prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select Presentation Variable in the **Prompt for** field and then enter a name for the variable in the **Variable Name** field.

For information on working with variable prompts, see "Creating or Editing a Variable Prompt".

The value of a presentation variable is populated by the column or variable prompt with which it was created. That is, each time a user selects a value in the column or variable prompt, the value of the presentation variable is set to the value that the user selects.

### What Are Request Variables?

A request variable lets you override the value of a session variable but only for the duration of a database request initiated from a column prompt. You can create a request variable as part of the process of creating a column prompt.

A request variable that is created as part of a column prompt is associated with a column, and the values that it can take come from the column values.

To create a request variable as part of a column prompt, in the "New Prompt dialog" (or Edit Prompt dialog), you have to select Request Variable in the Set a variable field and then enter the name of the session variable that you want to override in the Variable Name field.

For information on working with column prompts, see "Creating or Editing a Column Prompt".

The value of a request variable is populated by the column prompt with which it was created. That is, each time a user selects a value in the column prompt, the value of the request variable is set to the value that the user selects. The value, however, is in effect only from the time the user presses the **Go** button for the prompt until the analysis results are returned to the dashboard.

### Where Can I Reference Variables?

You can reference variables in the following areas (but not all types of variables can be referenced in each area):

- Title views. See "Results tab: Title editor".
- Narrative views. See "Results tab: Narrative editor".
- Static text views. See "Results tab: Static Text editor"
- Filters. See "New Filter dialog" and "New EVALUATE\_PREDICATE Function
- Column formulas. See "Edit Column Formula dialog: Column Formula tab".
- Conditional formatting conditions. See "Column Properties dialog: Conditional Format tab" and "New Condition dialog".
- Table and column headings in analyses. See "Column Properties dialog: Column Format tab".
- Direct database requests. See "Working with Direct Database Requests".
- Dashboard prompts and inline prompts. See "New Prompt dialog".
- Headers and footers for PDF output. See "Edit Footer or Header dialog"
- Link or image objects in a dashboard. See "Link or Image Properties dialog".
- Text objects in a dashboard. See "Text Properties dialog".
- Graphs to specify conditional formatting of graph data. See "Graph Properties dialog: Style tab" and "Style and Conditional Formatting dialog: Conditional Formatting tab".
- Gauge thresholds. See "Enter Expression dialog".
- Gauge limits. See "Customize Gauge Limit dialog".
- Agents. See the "Agent editor: Delivery Content tab".
- Actions to specify parameters. See "Create New Action dialog" and "Edit Parameter Mapping dialog".
- Conditions to specify parameters. See "New Condition dialog".
- Selection steps. See "New Condition Step dialog".
- KPIs to define thresholds. See "KPI editor: Thresholds page".
- KPIs included in a KPI watchlist. See "Add KPI dialog".
- URL fields in dialogs. See "Image Map Prompt Properties dialog".

For the syntax that you need to use to reference variables, see "What Is the Syntax for Referencing Variables?"

### What Is the Syntax for Referencing Variables?

You can reference variables in analyses, dashboards, KPIs, and agents. How you reference a variable depends on the task that you are performing.

For tasks where you are presented with fields in a dialog, you need to specify only the type and name of the variable (not the full syntax), for example, referencing a variable in a filter definition.

For other tasks, such as referencing a variable in a title view, you specify the variable syntax. The syntax you use depends on the type of variable as described in Table 2–1.

**Note:** In the syntax, if the "at" sign (@) is not followed by a brace ({), then it will be treated as an "at" sign.

Table 2–1 Syntax for Referencing Variables

| Type of Variable | Syntax  | Example                                       |
|------------------|---|---|
| Session          | @{biServer.variables['NQ_SESSION.variablename']}  | @{biServer.variables['NQ_SESSION.USER']}      |
|                  | where <i>variablename</i> is the name of the session variable, for example DISPLAYNAME.   |   |
|                  | For a list of system session variables that you can use, see the Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.  |   |
| Repository       | @{biServer.variables.variablename}  | @{biServer.variables.prime_begin}             |
|                  | or  | or  |
|                  | @{biServer.variables['variablename']}   | @{biServer.variables['prime_begin']}          |
|                  | where <i>variablename</i> is the name of the repository variable, for example, prime_begin.   |   |
| Presentation     | @{variables.variablename}[format]{defaultvalue}   | @{variables.MyFavoriteRegion}{EASTERN REGION} |
| or request       | or  | or  |
|                  | @{scope.variables['variablename']}  | @{dashboard.variables['MyFavoriteRegion']}    |
|                  | where:  |   |
|                  | • <i>variablename</i> is the name of the presentation or request variable, for example, MyFavoriteRegion.   |   |
|                  | (optional) <i>format</i> is a format mask dependent on the data type of the variable, for example #,##0, MM/DD/YY hh:mm:ss. (Note that the format is not applied to the default value.)   |   |
|                  | <ul> <li>(optional) defaultvalue is a constant or variable<br/>reference indicating a value to be used if the<br/>variable referenced by variablename is not<br/>populated.</li> </ul>  |   |
|                  | scope identifies the qualifiers for the variable. You<br>need to specify the scope when a variable is used<br>at multiple levels (analyses, dashboard pages, and<br>dashboards) and you want to access a specific<br>value. (If you do not specify the scope, then the<br>order of precedence is analyses, dashboard pages,<br>and dashboards.) |   |

You also can reference variables in expressions. The guidelines for referencing variables in expressions are described in Table 2–2.

Table 2–2 Guidelines for Referencing Variables in Expressions

| Type of Variable | Guidelines   | Example  |
|------------------|--|--|
| Session          | <ul> <li>Include the session variable as an argument of the VALUEOF function.</li> <li>Enclose the variable name in double quotes.</li> </ul>  | "Market"."Region"=VALUEOF(NQ_SESSION."SalesRegion")  |
|                  | <ul> <li>Precede the session variable by NQ_<br/>SESSION and a period.</li> </ul>  |  |
|                  | <ul> <li>Enclose both the NQ_SESSION portion<br/>and the session variable name in<br/>parentheses.</li> </ul>  |  |
| Repository       | <ul> <li>Include the repository variable as an argument of the VALUEOF function.</li> </ul>  | CASE WHEN "Hour" >= VALUEOF("prime_begin") AND "Hour" < VALUEOF("prime_end") THEN 'Prime Time' |
|                  | <ul> <li>Enclose the variable name in double quotes.</li> </ul>  | WHEN ELSEEND   |
|                  | Refer to a static repository variable by name.   |  |
|                  | Refer to a dynamic repository variable by its fully qualified name.  |  |
|                  | If you are using a dynamic repository variable, then the names of the initialization block and the repository variable must be enclosed in double quotes ("), separated by a period, and contained within parentheses. For example, to use the value of a dynamic repository variable named REGION contained in a initialization block named Region Security, use this syntax: |  |
|                  | VALUEOF("Region Security"."REGION")  |  |
|                  | For more information on repository variables, see the Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.  |  |
| Presentation     | ■ Use this syntax:   | "Market"."Region"=@{MyFavoriteRegion}{EASTERN  |
|                  | <pre>@{variablename}{defaultvalue} where variablename is the name of the</pre>   | REGION }   |
|                  | presentation variable and <i>defaultvalue</i> (optional) is a constant or variable reference indicating a value to be used if the variable referenced by <i>variablename</i> is not populated.   |  |
|                  | To type-cast (that is, convert) the variable to a string, enclose the entire syntax in single quotes, for example:   |  |
|                  | '@{user.displayName}'  Note: If the @ sign is not followed by a {, then it will be treated as an @ sign.   |  |

For the specific areas where you can reference variables, see "Where Can I Reference Variables?".

## **What Predefined Presentation Variables Are Available?**

Table 2-3 contains a list of the predefined presentation variables that you can reference in analyses, dashboards, KPIs, and agents. (Note that the syntax for these predefined presentation variables omits the variables. qualifier, for example, @{session.locale} rather than @{session.variables.locale}.)

**Note:** For time zone variables, the time zone for a user must be set to a value other than Default in order for this variable to work. (Users set their preferred time zone in the "My Account dialog: Preferences tab".)

Table 2-3 **Predefined Presentation Variables** 

| Scope     | Presentation Variable  | Example  |
|-----------|--|--|
| system    | productVersion   | system.productVersion = 11.1.1.3 (Build 090619.0110.000) |
| system    | currentTime  | system.currentTime = 6/29/2009 7:35:59 PM                |
| session   | locale   | session.locale = en-us                                   |
| session   | language   | session.language = en                                    |
| session   | rtl  | session.rtl = false                                      |
|           | This indicates whether the language selection in<br>the Login page is a right to left language. For<br>example, if the language selection is Hebrew, then<br>this variable returns true. |  |
| session   | timeZone   | session.timeZone = (GMT-06:00) Central<br>America        |
| session   | timeZone.id  | session.timeZone.id = (GMT-06:00) Central                |
|           | This returns a value that is not localized.  | America  |
| session   | timeZone.name  | session.timeZone.name = (GMT-06:00) Central<br>America   |
|           | This returns a localized value.  | America  |
| session   | timeZone.value   | session.timeZone.value = (GMT-06:00) Central<br>America  |
|           | This returns a localized value.  |  |
| session   | loginTime  | session.loginTime = 6/29/2009 7:12:01 PM                 |
| session   | logoutTime   | session.logoutTime = 6/29/2009 8:02:01 PM                |
| session   | lastAccessTime   | session.lastAccessTime = 6/29/2009 7:35:59<br>PM         |
| session   | currentUser  | session.currentUser = Administrator                      |
| session   | currency.name  | session.currency.name = \$ English - United States       |
| session   | currency.symbol  | session.currency.symbol = \$                             |
| session   | currency.userPreference  | session.currency.userPreference = Global<br>Currency 2   |
| user      | id   | user.id = Administrator                                  |
| user      | displayName  | user.displayName = Administrator                         |
| user      | homeDirectory  | user.homeDirectory = /users/administrator                |
| dashboard | currentPage  | dashboard.currentPage = page 1                           |
| dashboard | xml  | dashboard.xml = the dashboard XML                        |
| dashboard | dashboard.currency.name  | dashboard.currency.name = Euro                           |
| dashboard | dashboard.currency.symbol  | dashboard.currency.symbol = \$                           |
| dashboard | dashboard.currency.userPreference  | dashboard.currency.userPreference = Global<br>Currency 1 |

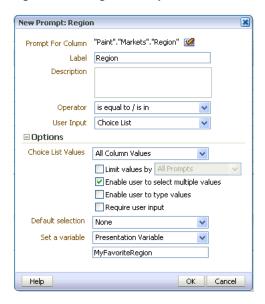
Table 2–3 (Cont.) Predefined Presentation Variables

| Scope                      | Presentation Variable                             | Example  |
|----------------------------|---|--|
| dashboard                  | dashboard.path                                    | dashboard.path = /users/administrator/_                                |
|                            | This returns the path in the catalog.             | portal/Sales   |
| dashboard                  | dashboard.name                                    | dashboard.name = MyDashboard   |
| dashboard                  | dashboard.caption                                 | dashboard.caption = Sales  |
|                            | This returns the localized name of the dashboard. |  |
| dashboard                  | dashboard.location                                | dashboard.location =   |
|                            | This returns the URL for the location.            | Dashboard&PortalPath=/users/administrator/_portal                      |
| dashboard                  | dashboard.description                             | dashboard.description = Sales by region and district                   |
| dashboard                  | dashboard.author                                  | dashboard.author = Administrator                                       |
| dashboard.c<br>urrentPage  | dashboard.currentPage.name                        | dashboard.currentPage.name = Sales page 1                              |
| dashboard.c<br>urrentPage  | dashboard.currentPage.path                        | dashboard.currentPage.path = /users/administrator/_portal/Sales/page 1 |
| dashboard.<br>current Page | dashboard.currentPage.currency.name               | dashboard.currentpage.currency.<br>name = USD                          |
| dashboard.c<br>urrent Page | dashboard.currentPage.currency.symbol             | dashboard.currentPage.currency.<br>symbol = USD                        |
| dashboard.<br>current Page | dashboard.currentPage.currency.userPreference     | dashboard.currentPage.currency.userPreferenc<br>e = Global Currency 2  |
| analysis                   | report.currency.name                              | report.currency.name = \$ English - United<br>States                   |
| analysis                   | report.currency.symbol                            | report.currency.symbol = \$  |
| analysis                   | report.currency.userPreference                    | report.currency.userPreference = Global Currency 2                     |

## **Example of Referencing a Variable in a Title View**

Suppose that you have created a dashboard prompt called Region, which is based on the Region column and which creates a presentation variable called MyFavoriteRegion as shown in Figure 2–3.

Figure 2-3 Region Prompt



Suppose also that you have created an analysis that shows Dollars by Region and District. You have also added a filter on the Region column that is set to Is Prompted so that you can prompt the user for a region using this Region prompt.

You can reference the MyFavoriteRegion variable in the Title view so that the user's selection in the Region prompt is displayed in the title of the analysis. To do so, you enter the variable syntax @{variables.MyFavoriteRegion} in the Title field in the Title editor, as shown in Figure 2–4.

Figure 2–4 MyFavoriteRegion Variable Referenced in the Title View

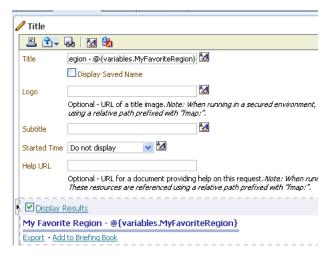


Figure 2–5 shows the results on a dashboard page when a user selects EASTERN REGION in the Region prompt. Notice that the variable in the title has been updated to the user's selection, EASTERN REGION.

**⊻** 籠 Region EASTERN REGION OK Reset My Favorite Region - EASTERN REGION Region District Dollars EASTERN REGION | BOSTON DISTRICT 66602781.00 NEW YORK DISTRICT 92244702.00 PHILADELPHIA DISTRICT 76802978.00 YOUNGSTOWN DISTRICT 42508565.00

Figure 2–5 Results of Referencing My Favorite Region in the Title View

# **Adding Views for Display in Dashboards**

This chapter describes how to add and modify views. It contains the following topics:

- "What are Views?"
- "What Types of Views Are Available?"
- "How Has the Behavior of Charts Created in Previous Releases Changed?"
- "Adding Views to the Results of Analyses"
- "Editing Views"
- "Modifying Values and Performing Write Back"
- "Interactions in Views"
- "Drilling in Views"
- "Sorting Data in Views"
- "Saving Views"
- "Rearranging Views"
- "Printing Views"
- "Changing Print Options for Views"
- "Previewing How Views Will Be Displayed on a Dashboard"
- "Removing Views"
- "Refreshing the Results in Views"
- "Customizing Views for Delivery to Agent Users"
- "What is Master-Detail Linking of Views?"
- "Linking Views in Master-Detail Relationships"

## What are Views?

Views use the presentation capabilities of Oracle BI Enterprise Edition to help you look at results of analyses in meaningful, intuitive ways. You can add a variety of views to the results, such as graphs and pivot tables that allow drilling down to more detailed information, explanatory text, a list of filters that were used to limit the results, and more.

When you display the results of a new analysis, the following views are displayed by default in the "Compound Layout" in the "Analysis editor: Results tab":

A title view, which displays the name of the saved analysis.

- A table or pivot table view, which displays the results of the analysis, depending on the types of columns that the analysis contains:
  - If the analysis contains only attribute columns, only measure columns, or a combination of both, then a table is the default view.
  - If the analysis contains at least one hierarchical column, then a pivot table is the default view.

You can customize or delete the existing views for an analysis, add other views, and combine and position views anywhere in the pane.

Preparing multiple views of results can help you identify trends and relationships in data. If you are customizing results for display on a dashboard, then you can preview how the combination and position of views will look when viewed on a dashboard.

You can then save the analysis with the collection of views.

## **Related Topics**

"What Types of Views Are Available?"

"Adding Views to the Results of Analyses"

"Editing Views"

"Saving Views"

"Removing Views"

## What Types of Views Are Available?

Table 3–1 describes the types of views that available.

**Note:** Your privileges control whether you can access all views or specific views only.

Table 3-1 View Names and Descriptions

| View Name   | Description   |
|-------------|---|
| Title       | Displays a title, a subtitle, a logo, a link to a custom online help page, and timestamps to the results.   |
| Table       | Displays results in a visual representation of data organized by rows and columns. A table provides a summary view of data and allows users to see different views of data by dragging and dropping rows and columns.   |
| Pivot Table | Displays results in a pivot table, which provides a summary view of data in cross-tab format and allows users to see different views of data by dragging and dropping rows and columns. Pivot tables structure data similarly to standard tables that contain column groups, but can display multiple levels of both row and column headings. Unlike regular tables, each data cell in a pivot table contains a unique value. By organizing data in this way, a pivot table is more efficient than a row-based table. Pivot tables are ideal for displaying a large quantity of data, for browsing data hierarchically, and for trend analysis. |
| Graph       | Displays numeric information visually, which makes it easier to understand large quantities of data. Graphs often reveal patterns and trends that text-based displays cannot. However, when precise values are needed, graphs should be supplemented with other data displays, such as tables.  A graph is displayed on a background, called the graph canvas.  |
|             | For the types and subtypes of graphs that are available, see Table 3–2.   |

Table 3–1 (Cont.) View Names and Descriptions

| View Name       | Description   |
|-----------------|---|
| Funnel          | Displays results as a three-dimensional graph that represents target and actual values using volume, level, and color. Typically, funnel graphs are used to graphically represent data that changes over different periods or stages. For example, funnel graphs are often used to represent the volume of sales over a quarter.                              |
|                 | Funnel graphs are well suited for showing actual compared to targets for data where the target is known to decrease (or increase) significantly per stage, such as a sales pipeline.  |
|                 | In funnel graphs, the thresholds indicate a percentage of the target value, and colors provide visual information for each stage. You can click one of the colored areas to drill down to more detailed information.  |
|                 | For the types of funnel graphs that are available, see Table 3–3.   |
| Gauge           | Shows a single data value. Due to its compact size, a gauge is often more effective than a graph for displaying a single data value   |
|                 | Gauges identify problems in data. A gauge usually plots one data point with an indication of whether that point falls in an acceptable or unacceptable range. Thus, gauges are useful for showing performance against goals.  |
|                 | Depending on the data in the analysis, a gauge view might consist of multiple gauges in a gauge set. For example, if you create a gauge view to show the sales data for the last twelve months, the gauge view consists of twelve gauges, one for each month. If you create one to show the total sales in the US, then the gauge view consists of one gauge. |
|                 | A gauge or gauge set is displayed on a background, called the gauge canvas.   |
|                 | For the types of gauges that are available, see Table 3–4.  |
| Map view        | Displays results overlain on a map. Depending on the data, the results can be overlain on top of a map as formats such as images, color fill areas, bar and pie graphs, and variably sized markers.   |
| Filters         | Displays the filters in effect for an analysis. Filters allow you to constrain an analysis to obtain results that answer a particular question.   |
| Column Selector | Adds a column selector in the results. A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis.  |
| View Selector   | Adds a view selector in the results. A view selector is a drop-down list from which users can select a specific view of the results from among the saved views.   |
| Legend          | Adds a legend to the results, which enables you to document the meaning of special formatting used in results, such as the meaning of custom colors applied to gauges.  |
| Narrative       | Displays the results as one or more paragraphs of text. You can type in a sentence with placeholders for each column in the results, and specify how rows should be separated.  |
| Ticker          | Displays the results as a ticker or marquee, similar in style to the stock tickers that run across many financial and news sites on the Internet. You can control what information is presented and how it scrolls across the page.   |
| Static Text     | Adds static text in the results. You can use HTML to add banners, tickers, ActiveX objects, Java applets, links, instructions, descriptions, graphics, and so on, in the results.   |

Table 3–1 (Cont.) View Names and Descriptions

| View Name          | Description   |
|--------------------|---|
| Logical SQL        | Displays the SQL statement that is generated for an analysis. This view is useful for trainers and administrators, and is usually not included in results for typical users. You cannot modify this view, except to format its container or to delete it.   |
| Create Segment     | Displays a Create Segment link in the results. Users can click this link to create a segment in their Oracle's Siebel Marketing operational application, based on the results data.   |
|                    | This view is for users of the Oracle's Siebel Marketing Version 7.7 (or higher) operational application. For information, see <i>Oracle Marketing Segmentation Guide</i> .  |
| Create Target List | Displays a Create Target List link in the results. Users can click this link to create a target list, based on the results data, in their Oracle's Siebel operational application. This target list can be used as the foundation for initiating and logging call activity information for this defined set of targets. |
|                    | This view is for users of Oracle's Siebel Life Sciences operational application integrated with Oracle's Siebel Life Sciences Analytics applications  |

## What Types of Graphs Are Available?

Table 3–2 shows the types of graphs that are available and describes their uses. It also shows the available styles for each type. All graph types with the exception of scatter and radar graphs can be 2-dimensional (2D) or 3-dimensional (3D). Not all types of graphs are appropriate for all types of data.

Table 3–2 **Graph Types** 

| Graph Type   | Description  | Styles   |
|--|--|--|
| Bar<br>Subtypes available:<br>Vertical<br>Horizontal<br>Stacked Vertical<br>Stacked Horizontal | Shows quantities associated with categories. Bar graphs show quantities as bar lengths and categories as bars or groups of bars.  Bar graphs are useful for comparing differences among like items; for example, competing product sales, same product sales over different time periods, or same product sales over different markets.  Can be used to compare measure columns by showing bars in a horizontal or vertical direction. | Rectangle<br>Triangle<br>Cylinder<br>Diamond<br>Gradient<br>Pattern Fill |
| Line   | Shows quantities over time or by category.  Line graphs are useful for showing trends over time.  Can be used to plot multiple measure columns.  | Standard Line<br>Stepped Line<br>Curved Line                             |
| Area   | Shows the trend of the contribution of each value over time or by category.  It is a line graph for which the regions between lines are filled in. Regions stack, adding up to the total value for each time period or category.   | Solid Fill<br>Gradient Fill<br>Pattern Fill                              |
| Pie  | Shows data sets as percentages of a whole.  Pie graphs are useful for comparing parts of a whole, such as sales by region or by district.  | Solid Fill<br>Gradient Fill<br>Pattern Fill                              |
| Line-Bar<br>Subtypes available:<br>Standard<br>Stacked   | Plots two sets of data with different ranges, one set as bars, and one set as lines overlaid on the bars.  Line bar graphs are useful for showing trend relationships between data sets.   | Rectangle<br>Triangle<br>Cylinder<br>Diamond<br>Gradient<br>Pattern Fill |

Table 3–2 (Cont.) Graph Types

| Graph Type       | Description   | Styles   |
|------------------|---|--|
| Time Series Line | Plots time series data. It scales the horizontal axis based on the time that has elapsed between data points.   | Standard Line<br>Stepped Line<br>Curved Line                             |
| Pareto           | Is a form of bar graph and line graph that displays criteria in descending order. In this graph type, the line shows a cumulative total of the percentages.  Pareto graphs are useful for identifying significant elements, such as best and worst or most and least.   | Rectangle<br>Triangle<br>Cylinder<br>Diamond<br>Gradient<br>Pattern Fill |
| Scatter          | Displays x-y values as discrete points, scattered within an x-y grid. It plots data points based on two independent variables. This enables you to plot large numbers of data points and observe the clustering of data points.   | Standard Scatter<br>Scatter-with-Lines                                   |
|                  | Scatter graphs are useful for observing relationships and trends in large data sets.  |  |
| Bubble           | Is a variation of a scatter graph that displays data elements as circles (bubbles). It shows three variables in two dimensions. One value is represented by the location of the circle on the horizontal axis. Another value is represented by the location of the circle on the vertical axis. The third value is represented by the radius of the circle. | None   |
|                  | Bubble graphs are useful for plotting data with three variables, and for displaying financial data over a period of time.   |  |
| Radar            | Plots the same information as a bar graph, but instead displays data radiating from the center of the graph. Each data element has its own value axis.  | None   |
|                  | Radar graphs are useful for examining overlap and distribution.   |  |

## What Types of Funnel Graphs Are Available?

Table 3–3 lists and describes the types of funnel graphs that are available. The style of each type can be either solid or gradient fill.

Table 3–3 Funnel Graph Types

| Туре            | Description   |
|-----------------|---|
| Standard        | Uses a standard shape with equal stage widths.  |
| Non-Standard    | Uses a standard shape with unequal stage widths   |
| Last-Stage Only | Uses a standard shape with equal stage widths. It is similar to standard funnel except that the target values of all the stages before the last is calculated based on the last stage target value and a constant called target factor. |

## What Types of Gauges Are Available?

Table 3–4 lists and describes the types of gauges that are available. All gauges are 2-dimensional (2-D) with the exception of bulb gauges which can be either 2-dimensional or 3-dimensional (3-D). Their sizes can be small, medium, large, or a custom size.

Table 3–4 Gauge Types

| Туре           | Description   |
|----------------|---|
| Dial           | Shows data using a dial arc with one or more indicators that point to to where the data falls within predefined limits.   |
| Horizontal bar | Shows data using a horizontal bar that changes color to indicate whether the data is within predefined limits. The inner rectangle of the horizontal bar shows the current level of data against the ranges marked on an outer rectangle. |
| Vertical bar   | Shows data using a vertical bar that changes color to indicate whether the data is within predefined limits. The inner rectangle of the vertical bar shows the current level of data against the ranges marked on an outer rectangle.     |
| Bulb           | Shows data using a circle that changes color to indicate whether the data is within predefined limits.  |
|                | Bulb gauges are useful when you need to know what the status is, and not any indication of a specific value, or relative information about other threshold ranges.  |

## How Has the Behavior of Charts Created in Previous Releases Changed?

Note the following changes in the behavior of charts (known as graphs in this release) that were created in previous releases:

- In this release for a pareto graph, the vertical axis 2 ranges from 0% to 100%. Therefore, you cannot change the abbreviation that is used for scale and data labels, (for example, you cannot change it to Million(m)). You also cannot override the default numeric format in which data labels are currently displayed.
- In this release for a scatter graph, unlike in previous releases, the scatter graph does not require at least one attribute column on the Group By axis.
- In this release for a stacked vertical bar graph and a stacked horizontal bar graph, the order of stacking is the reverse of the order in previous releases.
- In this release for a gauge, the ranges must be continuous (for example, range1: 1-200, range2: 200-400, and range3: 400-500). In previous releases, ranges that were not continuous were allowed (for example, range1: 0-200, range2: 400-500, and range3: 200-400).
- In this release, the logarithmic scale behaves in the following ways:
  - If you specify the scale limits, then the scale limits for the logarithmic scale must be powers of 10 only. If the number that you specify is not an exact power of 10, then the power of 10 closest to the number that you specify is used.
  - If you let the system determine the scale, then the lower limit changes dynamically based on the measure used.

In previous releases, the logarithmic scale behaved in the following ways:

- If you specified the scale limits, then the scale limits for the logarithmic scale were numbers fully divisible by 10. If the number that you specified was not divisible by 10, then the number closest to the number that you specified that was fully divisible by 10 was used.
- If you let the system determine the scale, then the lower limit always started at 1 and the upper limit changed based on the measures used.

## Adding Views to the Results of Analyses

To add a view to the results of an analysis:

In the "Analysis editor: Results tab" (or alternatively in the "Views pane"), click the **New View** toolbar button, then the name of the view that you want to create.

The view is displayed in a container on the "Compound Layout". (Note that defaults are used to generate this view, such as the default view type, default formatting, and so on.)

**Note:** If you select a graph type or gauge type that is incompatible with the results, then no results are shown.

**Note:** Do not use a pie graph to visualize data that includes negative values. Either filter the analysis to ensure that all values are greater than 0 or use a different graph type.

To format the container for the view, click the Format Container toolbar button on the view container to display a formatting dialog.

For information, see Chapter 7, "Formatting Analyses, Views, and Dashboard Pages.".

- To edit the view, click the **Edit View** toolbar button on the view container. For more information, see "Editing Views".
- Save the view. For information, see "Saving Views".)

## **Editing Views**

Each view type, with the exception of a Logical SQL view, has its own editor in which you perform your edits. (You cannot edit a Logical SQL view. You can only format its container or delete it.)

Each view editor contains unique functionality for that view type but might also contain functionality that is the same across view types.

### To edit a view:

- Open the analysis that contains the view that you want to edit.
- Click the "Analysis editor: Results tab".
- Click the **Edit View** button for the view (or, alternatively, select the view in the "Views pane" and click the **Edit View** toolbar button).

One of the following editors is displayed:

- "Results tab: Column Selector editor"
- "Results tab: Create Segment editor"
- "Results tab: Create Target List editor"
- "Results tab: Filters editor"
- "Results tab: Funnel editor"
- "Results tab: Gauge editor"

- "Results tab: Graph editor"
- "Results tab: Legend editor"
- "Results tab: Map editor"
- "Results tab: Narrative editor"
- "Results tab: Pivot Table editor"
- "Results tab: Static Text editor"
- "Results tab: Table editor"
- "Results tab: Ticker editor"
- "Results tab: Title editor"
- "Results tab: View Selector editor"
- **4.** Using the editor for the view, make the edits that you want.

For additional guidance, see:

- "Editing Table and Pivot Table Views"
- "Editing Graph Views"
- "Editing Gauge Views"
- "Editing Map Views"
- "Editing Narrative Views"
- "Editing Column Selector Views"
- "Editing View Selector Views"
- "Editing Legend Views"
- Click **Done**.
- Save the view. For information, see "Saving Views".

## **Editing Table and Pivot Table Views**

Two common views for analyzing and displaying data are the table and pivot table. These views share the same type of editor and much of the same functionality such as dragging and dropping, sorting, drilling, and conditional formatting. The following list provides some differences between the two types:

- **Default View** When you create an analysis and display the results, the default view depends on the data in the analysis:
  - **Table** If the analysis contains only attribute columns, only measure columns, or a combination of both, then a table is the default view.
  - **Pivot Table** If the analysis contains at least one hierarchical column, then a pivot table is the default view.
- **Drop Targets** Drop targets, which you use to modify column layout, differ slightly between the two views. Both views have the *view-type>* Prompts, Sections, and Excluded drop targets.
  - **Table** Tables have columns and measures in the same drop target, and they do not have rows.
  - **Pivot Table** Pivot tables can have rows, columns, and measures as separate drop targets.

- **Drag and Drop Measure Columns** Measure columns behave slightly different when you drag and drop them on tables and pivot tables.
  - **Table** In tables, you can drag and drop measure columns in the middle of the table and they act as columns.
  - **Pivot Table** In pivot tables, you can drag and drop measure columns in the middle and their labels can be in many locations.
- **Column Names and Headings** You can turn off the display of the column headings in both tables and pivot tables.
  - **Table** In tables, you always see the names of columns.
  - **Pivot Table** In pivot tables, you can turn off the display of the column names.
- **Properties** The properties of the two views differ slightly, in areas such as paging controls and green bar formatting.

You can use the editors for the table and pivot table to customize the look and functionality of the view. The editors share much of the same functionality.

### To edit a table or pivot table:

- Display the "Results tab: Table editor" or the "Results tab: Pivot Table editor". For information, see "Editing Views".
- To set the properties of the table or pivot table, click the **Table View Properties** or the **Pivot Table View Properties** button on the toolbar. The "Table Properties dialog" or the "Pivot Table Properties dialog" is displayed, where you can:
  - Specify formatting preferences for tables and pivot tables.
  - Set up for users to modify values in columns in tables, which is referred to as "write back."
- Use the buttons on the toolbar of the editor to perform functions such as the following:
  - To modify formatting, see "Applying Formatting to Tables and Pivot Tables".
  - To add a group or calculated item to the view, see "Working with Groups and Calculated Items".

For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views". For more information on specific data view buttons, see "Data View Editor Toolbar".

- To affect the contents of the view, use the following panes:
  - The "Subject Areas pane"
  - The "Catalog pane"
  - The "Layout pane", as described in "Modifying the Layout of Data in Views"
  - The "Selection Steps pane"
- To drill in the data in the view, see "Drilling in Views".
- To specify the sort order for a column in the view, use the "Sorting Options Menu and Buttons".
- Right-click in a cell to perform basic view options. For information, see "Right-Click Menu for Tables and Pivot Tables".

**8.** Enable the write-back capability for a table, which allows a user to update or write to the back-end database, if your user name has the appropriate permissions. For example, a user can enter sales targets for the current quarter in a Sales dashboard. See "Modifying Values and Performing Write Back" for information about the write-back capability.

### Applying Formatting to Tables and Pivot Tables

Green bar styling shows alternating rows or columns in a light green color. Cosmetic formatting affects the overall appearance of the view and enables you to change the default green bar color.

### To add green bar styling and cosmetic formatting to a table or pivot table:

- In the toolbar of the editor, click the **View Properties** button. The "Table Properties dialog" or "Pivot Table Properties dialog" is displayed.
- To add green bar styling, click the green bar styling box. To change the way the styling is applied, select a style from the list.
- To add cosmetic formatting, click the alternate formatting button. The "Edit Format dialog" is displayed.
- To change the default green bar color, choose a new background color for the cell format. Make any other appropriate changes, and click **OK**.
- In the Properties dialog, make any other appropriate changes, and click **OK**. For more information about cosmetic formatting, see "What is Cosmetic Formatting?"

## **Editing Graph Views**

#### To edit a graph view:

- Display the "Results tab: Graph editor". For information, see "Editing Views".
- To set the properties of graph, click the **Edit Graph Properties** button on the toolbar. The "Graph Properties dialog" is displayed, where you can set properties:
  - Related to the graph canvas, such as legend location
  - That control the appearance of the graph, such as the style
  - For axis limits and tick marks.
  - That control the display of titles and labels for the graph
- **3.** Use the buttons on the toolbar of the editor to perform functions such as printing a view, exporting a view, and so on.

For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views". For more information on specific data view buttons, see "Data View Editor Toolbar".

- To affect the contents of the view, use the following panes:
  - "Subject Areas pane"
  - "Catalog pane"
  - "Layout pane", as described in "Modifying the Layout of Data in Views"
  - "Selection Steps pane"

- (for funnel graphs and gauges only) "Settings pane" to set thresholds
- To drill in the data in the view, see "Drilling in Views".

## Formatting the Visual Appearance of Graphs

You can format the visual appearance of graphs based on two settings:

- The position of the graph elements (such as lines or bars in a line-bar graphs or slices in a pie graphs).
  - See "Graph Formatting Based on Position"
- Conditions applied to columns. See "Graph Formatting Based on Columns"

Graph Formatting Based on Position Positional formatting enables you to customize the appearance of a graph based on the position of graph elements; that is, the numeric sequence in which graph elements (for example, bars) are displayed in a group. A group is determined by the attribute columns that are displayed in the Group By drop target area. (For information on drop target areas, see "Understanding Drop Targets".

For example, suppose that you have a bar graph whose criteria includes the Region, Dollars, and Units columns. Dollars appears first, then Units in the Measures drop target area. Region appears in the Group By drop target. In this graph, Dollars is in position 1 and Units is in position 2 for each regional grouping as shown in Figure 3–1.

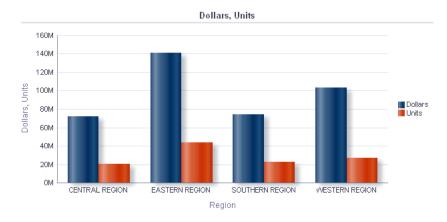


Figure 3-1 Example of Position in a Graph

You can format the visual appearance of a graph based on position in terms of its color, line width, and line symbols.

Graph Formatting Based on Columns Conditional formatting enables you to customize the appearance of a graph based on conditions applied to columns. The formatting is applied to the column values that meet the condition.

You can specify a color in which to display graph data based upon a specific column value, or range of column values that meet the condition specified for the column.

## For example:

Conditionally changing the color of a graph based on specific column values.

A user wants to create a bar graph to compare sales between two beverages, Lemonade and Cola. When creating a bar graph the user specifies two conditions, one where the bar representing Lemonade sales is yellow, and another where the bar representing Cola sales is blue.

Conditionally changing the color of a graph based on a range of column values.

A sales manager wants to create a bar graph to compare sales for all reps across two sales bands. When creating a bar graph the sales manager specifies two conditions, one where the bar is red for all sales reps with sales less than \$250,000, and another where the bar is green for all sales reps with sales greater than \$250,000.

The way that you specify conditional formatting for graphs is different from that used for other views. For information, see "Applying Conditional Formatting to Tables and Pivot Tables".

### To format the appearance of a graph:

Click **Edit Graph Properties** in the toolbar of the graph editor.

The "Graph Properties dialog" is displayed.

- **2.** Click the "Graph Properties dialog: Style tab".
- **3.** Click the **Style and Conditional Formatting** button.

The "Style and Conditional Formatting dialog" is displayed.

4. Click "Style and Conditional Formatting dialog: Style Formatting tab" to format the appearance of a graph based on position of the graph elements.

To add a custom formatted position:

- **a.** Select the tab for the graph element (for example, bar) to which you want to add a custom formatted position.
- **b.** Click the **Add new position** button. A new position entry is displayed in the Custom Formatted Positions table.
- **c.** Specify the formatting that you want. For example, to select the color to be applied to the position, click the down arrow next to the Color box to access the Color Selector dialog. (Note that the formatting options depend on the element.)
- 5. Click the "Style and Conditional Formatting dialog: Conditional Formatting tab" to format the appearance of a graph based on a condition that is applied to columns.

To add a condition to a column:

**a.** Click **Add Condition Format** and select the column to which you want to apply a condition.

The "New Condition dialog" is displayed.

- **b.** Select the operator and enter a column value, or a range of column values for this condition.
- **c.** Click **OK** when you are done.

The new condition is displayed in the Conditional Formatting tab.

- **d.** To select the color to be applied to column values when the condition is met, click the down arrow next to the **Color** box to access the Color Selector dialog.
- Click **OK**.

Rules for Applying Conditional Formats in Graphs The following rules apply for building and using conditions in graphs:

Conditions can be created only from columns that are being used by the graph.

- When format conditions conflict with each other, conflicting conditions are prioritized in the following order:
  - 1. Conditional formatting on attributes
  - Conditional formatting on measures
  - Style formatting based on the positions of graph elements
- When a user drills on a graph that has conditional formatting applied, the following rules apply:
  - A conditional format based on measures is not carried to the next level. (It does not make sense to carry the conditional format to a different level; for example if, in a geographic hierarchy, from Region to City.
  - A conditional format based on attributes is carried to the next graph if it has not been drilled on.

For example, if you had the conditional format "Lemonade = Blue" and only drill on years, then "Lemonade = Blue" will stay in place.

**Graph Exceptions for Conditional Formatting on Columns** Table 3–5 lists the graph exceptions that apply to conditional formatting based on columns.

Table 3-5 Graph Exceptions that Apply to Conditional Formatting Based on Columns

| Graph Type                                    | Exception   |
|---|---|
| Line<br>Line-Bar<br>Radar<br>Time Series Line | Only symbol formatting is allowed for the line.                 |
| Pareto  | Formatting is applied only to the bars, not to the Pareto line. |

## **Editing Gauge Views**

#### To edit a gauge view:

- Display the "Results tab: Gauge editor". For information, see "Editing Views".
- To set the properties of the gauge view, click the Edit Gauge Properties on the toolbar. The "Gauge Properties dialog" is displayed, where you can set properties:
  - Related to the gauge canvas, such as, legend location.
  - That control the appearance of the gauge, such as the width and height of the gauge.
  - For gauge limits and tick marks.
  - That control the display of titles, footers, and labels for the gauge or gauges in a gauge set.
- **3.** Use the buttons on the toolbar of the editor to perform functions such as printing a view, exporting a view, and so on.

For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views". For more information on specific data view buttons, see "Data View Editor Toolbar".

- To affect the contents of the view, use the following panes:
  - "Subject Areas pane"
  - "Catalog pane"

- "Layout pane", as described in "Modifying the Layout of Data in Views".
- "Selection Steps pane"
- "Settings pane" to set thresholds.
- To drill in the data in the view, see "Drilling in Views".

## **Editing Map Views**

You can create a map view for presenting business data to users. As with views such as tables, pivot tables, and graphs, map views allow users to display data on maps in a number of different formats and to interact with the data. When data is visualized on a map, relationships among data values that might not have been obvious previously can be displayed in a much more intuitive manner. For example, a map view can show a map of a city with the zip codes color-coded by sales performance, while an image marker displays the average discount given per order.

Changes to data are reflected in the map views, and users can perform the following tasks:

- Display data with a spatial attribute on a map:
  - Display color-coded regions as thematic maps.
  - Show point-based information, such as sales locations within territories.
  - Zoom, pan, and drill to additional map detail.
- Use a map view to interact with other dashboard elements:
  - Dashboard prompts drive map content.
  - Interaction with the map view updates other dashboard content, including driving master detail interactions with other views.
- Show additional related contextual information by hovering the mouse pointer over map areas.
- Allow users to perform additional tasks via actions.

**Note:** Before you as the content designer can create map views for analyses, the administrator must set configuration options and manage metadata, as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

### What are the Functions of Map Views?

Map views offer the following functions:

- You can display multiple attribute columns and measure columns on a map view. Map views do not support hierarchical columns.
- You can format a map view, including with colors, bar graphs, pie graphs, variably sized bubbles, images, or colored shapes that provide the ability for binning and other formatting options.
- You can drill in information windows. When you hover over a value, you see a popup with information such as the geographic region (city, state, or country), the measures in the form of column names and column values and formatting metrics, and non-geographic data such as Year. You can click the value to display the actionable links for drilling in the information window, then click the appropriate link.

## What Terms are used with Map Views

Table 3–6 defines the terms that are used with map views.

Table 3-6 Terms for Map Views

| Term    | Definition  |
|---------|---|
| Feature | An entity with spatial and non-spatial attributes such as cities, rivers, and highways. A feature can be represented by a polygon, a line or a point.   |
| Format  | Defines rendering properties for a feature. For example, if the feature is a polygon that shows a county, then the format can define the fill color for the county or can define a pie graph to be drawn over the county. Formats are tied to a particular geographic level such as continent, country, region, state, or city.   |
| Layer   | Any collection of features and formats that have a common set of attributes and a location. For example, a layer that shows US states can include color coding of states by sales, as well as a pie graph that shows sales per brand for that state. In addition to the US states layer, you can use a layer that displays stores within a state as individual points, with popup notes that show sales for each store. |
|         | Layers are displayed on a background or template map. When you zoom in and out on the map, various layers are hidden or displayed. Some layers must be enabled for data, so you can display it in the map. Other layers, such as one that shows roads, is not related to data.  |
| Мар     | A map that consists of a background or template map and a stack of layers that are rendered on top of each other in a window. A map has an associated coordinate system that all layers in the map must share. The map can be an image file, the object representation of an image file, or a URL that refers to an image file.   |

## What are the Components of Map Views?

A map view contains the following components:

- Main content The main content is the background or template map, which provides the background geographic data and zoom levels. The main content can be any image that can be configured using MapViewer, for example, the floor maps of office buildings and the appearance and presence of items such as countries, cities, and roads.
- Layers One or more interactive or custom layers overlay the main content. For information, see "What Are Layers?"
- Toolbar Provides buttons that allow you to manipulate map contents directly. The map view itself has a toolbar. The content designer specifies whether to display the toolbar for the map view on a dashboard page, in which the toolbar is displayed directly over the map and contains only the Pan, Zoom Out, and Zoom In buttons. The toolbar is visible by default and its display is controlled by the "Map Properties dialog: Tools tab".

Each button represents a mutually exclusive mode for manipulating the map contents. The default mode is Pan. When you click a button to activate a mode, that button becomes highlighted and the mouse pointer changes to match the image on the button.

The toolbar in the Map editor contains additional options for modifying the map view.

Zoom controls — Adjusts the detail of the geographic data that is shown in the map view. For example, zooming in from a country might show state and city details.

On the Administration page, the administrator specifies which layers are visible at which zoom levels. You can have multiple zoom levels for one layer, and you can have one layer associated with multiple zoom levels. When you zoom, you change the map information at that zoom level, but you do not affect the display of BI data at that level. You affect the display of BI data by drilling.

The zoom controls consists of pan buttons and a zoom slider that render in the upper left-hand corner of the map view. When the zoom control is zoomed-out all the way, the zoom level is set to 0 and the entire map view is displayed.

The "Map Properties dialog: Tools tab" lets you determine the visibility of the zoom control. By default, the map is initially zoomed out.

- Pan buttons Consists of buttons (with arrows that point north, south, east, west, northeast, northwest, southeast, and southwest) at the top of the zoom control. You can use these buttons to move the entire map in specific directions. When you click the pan center button, the map returns to the zoom level and the center that the map was displayed with initially.
- Zoom slider Consists of a slider with a thumb for large scale zooming and buttons for zooming a single level. You can use the plus button to zoom in and the minus button to zoom out one level at a time. When the thumb is at the bottom of the slider, the zoom level is zero.
- Scale tool Also known as Distance Indicator. Provides a key to distance interpretation of the map and consists of two horizontal bars that display in the lower left-hand corner of the map view below the information panel and above the copyright. The top bar represents miles (mi) and the bottom bar represents kilometers (km). Labels are displayed above the miles bar and below the kilometers bar in the format: [distance] [unit of measure]. The length and distance values of the bars change as the zoom level changes and as the map is panned.
- Legend The legend is a semi-transparent area in the upper right-hand corner of the map view that you can display and hide. The legend shows the information that relates to the current zoom level. The legend provides a read-only visual key for symbols, layers, and formatting on the map and displays the following:
  - All visible formats that are applied to the map. If a format is turned off, then the corresponding legend item is hidden also. If a format is turned on but zoomed out of view, then it is not displayed in the legend. The legend displays text such as "No formats defined for current zoom level" if you have no formats defined at the zoom level that is currently displayed.
  - Scrollbars, if needed

Use the Expand Map Legend and Collapse Map Legend buttons in the upper right-hand corner to control the display of the legend.

Overview map — Consists of a miniature view of the main map that is shown in the lower right-hand corner of the main map. This overview map provides regional context and lets you change the viewable area of the main map without having to use the pan buttons.

The following items are part of the overview map:

**Reticule:** Is displayed as a small window that you can move across a miniature view of the main map. The position of the reticule in the miniature map determines the viewable area of the main map. As you move the reticule, the main map is updated automatically. You can also pan in the overview map without using the reticule.

The overview map is automatically hidden if the reticule cannot be shown. This hiding generally happens when the scale difference between successive zoom levels is too small to show the miniature view in the overview map.

- **Show/Hide** button: Displays in the upper left-hand corner when the overview map is displayed. When you click the **Show/Hide** button, the overview map becomes invisible and only the button can be seen in the lower right-hand corner of the main map.
- Interactive panel Accompanies the view in a dashboard and in the "Compound Layout". The interactive panel allows you to create and edit BI data formats in the Analysis editor. If a format has editable thresholds, then a slider is displayed in the Map View editor that allows you to edit thresholds by dragging the slider. The interactive panel allows you to rearrange formats within a geographic layer. For example, if the States layer has three formats, then you can select the z-order in which they display.

Dashboard users can control the visibility of formats (by turning them on or off) and can adjust format thresholds if the content designer has allowed them to.

### What Are Layers?

Layers are collections of geometries that share common attributes. Layers can be either predefined or custom:

- A predefined layer is one whose geometry is defined in a spatial table in an Oracle Database. The administrator makes predefined layers available via the Administration pages, as described in *Oracle Fusion Middleware System* Administrator's Guide for Oracle Business Intelligence Enterprise Edition.
- A custom point layer is one that you define while editing a map view, as described in this section.

Layers can be of different types. A polygon layer represents regions, such as states. An example is a New England layer for the United States that consists of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

A point layer represents specific points on a map, based on a coordinate system. For example, a point layer might identify the locations of warehouses on a map. The layer can use a different image for the type of inventory (electronics, housewares, garden supplies) in a set of warehouses to differentiate them from each other.

You can create a custom point layer that applies points to a map using longitude and latitude coordinates. For example, suppose that your company is headquartered in New York City. You can create a custom point layer that displays your company icon over New York City, and that icon is always displayed whenever a map that includes New York City is shown. The custom point layer is always on top of the other layers and is not affected by zoom levels. The custom point layer is used only by the current map view in the current analysis; it is not used by other map views, even for the same analysis.

You can select layers to be visible or hidden on a map, but you cannot modify predefined layers. You also create formats to apply to the layers, such as colored regions, bubbles, points, or bar or pie graphs. Not all formats are available for all layer types. For example, point layers cannot have color fill formats.

### Creating Map Views

When the administrator has configured maps, you as the content designer can create analyses whose data is displayed in map views.

You create a map view after selecting columns to display in that view. If the administrator has specified multiple background maps, then the map view is initially displayed using the first background map that was specified by the administrator that includes at least one layer that has been associated with a column that you selected. When editing the map view, you can select a different background map. You can apply layers to the background map and formats to the layers.

### To create a map view for an analysis:

- 1. Create an analysis by selecting the attribute and measure columns that you want to display on a map view. You generally select attribute columns that are related to geography, such as Cities, States, or Regions.
  - Select only those geography columns that the administrator has mapped to layers via the Administration pages, as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.
- **2.** Select the Results tab.
- **3.** In the toolbar, click the **New View** button, then select **Map**.
  - If you see a message that states that a background map is required to render a map, then no metadata exists to populate the map. Contact the administrator about configuring the metadata for maps using the Administration page.
  - Otherwise you see a map that uses the background map that was specified on the Administration page.
- **4.** Click the **Edit View** button to display the view in the "Results tab: Map editor".
  - You see a default map view in which the measures have been divided into reasonable bins and color coding has been applied. You can adjust the map view and layers as you like. If you do not see any default format created, then you must create a format.
- Specify map view properties as appropriate using the "Map Properties dialog".
- Apply formats to the layers, as described in "Applying Formats to Layers".

### **How Do Formats Affect Layers?**

A map view uses columns of Oracle BI EE data. Each column has a set of properties that define its characteristics, such as for formatting and interaction. Any formatting that has been applied to a column is not applied to the map, with the exception of the settings for interaction. Any formatting that originates from thresholds that the map contains is applied.

You can apply various kinds of formats to map views. The following list describes the options for defining formats to apply to layers:

- **Color Fill** Displays the "Color Fill (Layer) dialog", which you use to render areas in fill colors that indicate that an area meets a particular condition.
  - Color fill formats apply to regions or polygons. For example, a color fill format might identify a range of colors to represent the population in the states of a region or the popularity of a product in the states of a region. A map view can have multiple color formats visible at different zoom levels. For example, a color fill format for the layer at zoom levels 1-5 might represent the population of a state, and the county median income for the layer at zoom levels 6-10. You can also specify different colors to identify a range of data values.
- Bar Graph Displays the "Bar Graph (Layer) dialog", which you use to render a series of data as a bar graph within an area. Graph formats can show statistics

related to a given region such as states or counties. For example, a graph format can display the sales values for a number of products in a state.

Even though you can create multiple graph formats for a particular layer, such creation is not recommend as the formats will overlap on the layer and the displayed results might be undesirable.

- Pie Graph Displays the "Pie Graph (Layer) dialog", which you use to render a series of data as a pie graph within an area.
- Shape Displays the "Variable Shape (Layer) dialog", which you use to render a measure column that is associated with an area by drawing markers or shapes within the region. You can also specify different colors for the shape to identify a range of data values.
- **Bubble** Displays the "Bubble (Layer) dialog", which you use to render a bubble within an area, similar to the shape format.
- **Image** Displays the "Image (Layer) dialog", which you use to render an image within an area, similar to the shape format. You can specify different images to identify a range of data values. You can select images that have been specified by the administrator.
- **Custom Point** Displays the Custom Point (*Layer*) dialog, which you use to render a point format, such as a bubble, image, or shape in a layer. Custom points are displayed at all zoom levels and on top of all other map formatting. When you create a Custom Point format, you select columns to specify the latitude and longitude.

**When Are Formats Visible?** The visibility of a format depends on the following:

- The zoom level on the map and the "zoom range" of the format. For example, a Color Fill format for States is visible when state boundaries are visible and it is turned on, but is no longer visible when the map is zoomed out to the Continent
- The data point limit. Formats are generally visible when they are zoomed into view and are turned on, but they might not be displayed if a particular layer has exceeded its maximum number of data points.

Custom point formats are unique in that they are displayed on the map always, for all zoom levels.

Format data is displayed in the legend only when the format is both turned on and zoomed into view. A format is turned on when the box beside its name is checked in the Map Formats area.

The map cannot display more than one non-point format at a time (at a single zoom level) but can display multiple point formats simultaneously, if they do not share the same latitude and longitude location. If multiple graph formats are specified at the same geographic layer, then they will render on top of each other.

Where Can Formats Be Applied? The following formats apply to geographic areas such as polygons: Color Fill, Bubble, Pie Graph, and Bar Graph.

The following formats are based on a single latitude and longitude location (a point): Bubble, Variable Shape, Image, and Custom Point.

When you define formats, you can specify that different formats apply to different measure columns in a layer.

## Applying Formats to Layers

To apply a format to each layer as appropriate, use one of the following ways:

- Click the Create a new Map Format link, if no layers are specified in the Map Formats list.
- Click the **Add New Map Formats** button, either in the Map Formats title bar or beside a layer name.

For more information, see "Showing or Hiding Formats on a Map View".

### Editing Map Views and Displaying Map Views on Dashboard Pages

Many of the same functions are available for map views, whether you are editing them or displaying them on a dashboard page. Some functions are available only when editing map views, as described in the following list:

- When you edit a map view and work with layers, you create formats for those layers. You can display a dialog for adding and editing formats. You can also specify the order of formats for each layer. The order affects the visibility of the formats for the layer. Formats that are displayed higher in the list overlay formats that are lower in the list. When you display a map view, you can turn on and off the display of formats, but you cannot add or remove them from the map view.
  - As the content designer editing a map view, you can control the display of layers, but only of those layers that the administrator has associated with this background map.
- When you edit a map view, you decide whether users of dashboard pages can modify the thresholds via sliders. When you display a map view, you can modify the thresholds (if that ability was provided). If you close and re-open the map view, then you see the thresholds at the same state in which you left them. To save the thresholds when you leave the dashboard, first save the customizations of the dashboard.
- When you edit or display a map view, legend contents display all active and visible formats.

For more information on the functions that are available when you display a map, see "Working with Map Views on Dashboard Pages".

## **Editing Narrative Views**

Use a narrative view to provide information such as context, explanatory text, or extended descriptions along with column values. You can include values from attribute columns, hierarchical columns, and measure columns. For a hierarchical column, you can use selection steps to display hierarchy levels with the hierarchical column. For example, create a step to select members based on hierarchy and add members of the specified level. You cannot drill in narrative views.

#### To edit a narrative view:

- Display the "Results tab: Narrative editor". For information, see "Editing Views".
- In the Narrative box, specify the columns to include in the view. To do so, use an at sign (@), optionally followed by a number. For example, include @2 to indicate the second column per the order of the column criteria.
- **3.** Complete other fields as needed.

## Editing Column Selector Views

A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis. Figure 3–2 shows an example of a column selector view.

Figure 3–2 Column Selector View



One drop-down list can be attached to each column in the analysis, and multiple columns can be attached to each drop-down list. You can create drop-down lists for attribute columns and measure columns. Updates that you make in the column selector view affect all the data views in the analysis.

You add columns to drop-down lists from the Subject Areas pane. When you add columns in this way, they are not added to the Criteria tab for the analysis. Instead, when you display the Criteria tab, you see that the column is now referred to as a "Column Group" with the default column for the list specified also. The default column is the one on which you created the drop-down list.

#### To edit a column selector view:

- Display the "Results tab: Column Selector editor". For information, see "Editing Views".
- 2. Select **Include Selector** for each column for which you want to include a drop-down list of columns. Ensure that the column is highlighted in the editor.
- To add a new column to a drop-down list, double-click the column that you want to add in the "Subject Areas pane".
- Complete the other fields as appropriate.

## **Editing View Selector Views**

A view selector view allows users to select a specific view of the results from among the saved views for an analysis. When placed on a dashboard, the view selector is displayed as a list from which users can choose the view that they want to display below the selector.

Generally, you would include views in the view selector that are not being displayed in the Compound Layout view. For example, you might create a table, graph, gauge, and view selector view for an analysis, but include only the table and view selector view on the Compound Layout view. When the analysis is displayed on a dashboard page, users can select the graph or gauge view from the view selector view.

#### To edit a view selector view:

- Display the "Results tab: View Selector editor". For information, see "Editing Views".
- 2. In the Available Views list, select the views to be included in the view selector and move them into the Views Included list.
- **3.** Complete other fields as needed.

## **Editing Legend Views**

### To edit a legend view:

- Display the "Results tab: Legend editor". For information, see "Editing Views".
- In the **Captions** box on the toolbar, select the position for the caption relative to the legend symbol.
- 3. In the Legend items per row box on the toolbar, select the number of legend items to display in a row.
- **4.** For each legend item:
  - **a.** In the **Caption** box, enter the meaning of the legend symbol.
  - **b.** In the **Sample Text** box, enter the text that is to be displayed within the legend symbol.

To add additional legend items, click **Add Caption**.

**5.** Complete other fields as needed.

## Modifying the Layout of Data in Views

Each editor for a data view contains the "Layout pane", except for the map editor. The Layout pane is displayed slightly differently for each view type, such as graphs and pivot tables. The Layout pane shows how the data in a view is laid out using drop targets. For more information on drop targets, see "Understanding Drop Targets".

You use the Layout pane to modify the way that data is arranged in the view. Specifically, you can:

- Modify the data in the view, as described in "Adding and Rearranging Columns in
- Set properties, as described in "Setting Properties for View Bodies and Drop Targets"
- Add totals, as described in "Adding Totals to Tables and Pivot Tables"
- Display running sums and relative values, as described in "Displaying Running Sums and Relative Values for Measure Columns in Pivot Tables"
- Define section sliders in graphs and gauges, as described in "Defining Section Sliders in Graphs and Gauges"
- Add legends to graphs by selecting the **Show In Legend** box in the Layout pane

### **Understanding Drop Targets**

In the Layout pane, the columns in a data view are displayed in drop targets. Drop targets indicate where a column can be inserted, moved to, or dropped. They represent a valid position for a column.

You use drop targets to modify the way data is arranged in a data view by dragging and dropping columns to different targets within the view.

Each data view contains the following drop targets:

*<view-type>* **Prompts** — Provides an interactive result set that allows users to select the data that they want to view. The values from the columns that are displayed in this drop target are used as the initial criteria. In a view, these values are displayed in a drop-down list for selection, which is often referred to as the "page edge."

- **Sections** Populates the areas that divide the view into sections. If you select the Display as Slider option in this drop target, then the values of the columns that are dropped in the Sections drop target are displayed as a section slider rather than as unique views.
- <*view-type>* area Simulates the plot area or the body of the view itself and assists you in seeing what the view looks like.
  - For tables, this area contains the **Columns and Measures** drop target, which contains all the columns in the view. In tables, all measures are treated as columns.

For all other data views, this area contains the following drop targets:

- **Measures drop target** Populates the part of a view that contains summary data. Depending on the type of view, this area might include a single Measures drop target (for example, for pivot tables) or might contain subdrops targets (for example, the Bars (Y1-Axis) and the Lines (Y2-Axis) for line bar graphs). You drag and drop measure columns to these drop targets.
- Other drop targets Used to summarize the columns in the measure drop target or targets. You generally drag and drop attribute and hierarchical columns to these drop targets.

The other drop targets that are displayed in a view depend on the type of view as described in Table 3–7.

Table 3–7 Other Drop Targets in Data Views

| View   | Drop Target or Targets  |
|--|---|
| Pivot table  | Includes these drop targets:  |
|  | ■ Columns — Shows a column in a column orientation. Pivot tables can contain multiple columns.  |
|  | ■ Rows — Shows a column in a row orientation. Pivot tables can contain multiple rows.   |
| Gauge  | Rows — Shows the columns that are displayed in the gauges.  |
| Bar, line, area, line-bar,<br>time series line,<br>pareto, scatter, or<br>bubble graph | Includes these sub-drop targets within the main drop target (Bars, Line, Area, Bars & Lines, Line, Points or Bubbles). Target names differ depending on graph type. For example, Group By is Bubbles for bubble graphs and Points for scatter graphs.                       |
|  | ■ <b>Group By</b> — Clusters the axis labels into groups. For example in a vertical bar graph whose criteria includes the Region, District, and Dollars column, if this drop target contains the Regions column, then the data is grouped by region on the horizontal axis. |
|  | ■ Vary Color By — Shows each column value or column value combination in a different color  |
| Radar graph  | <b>Radar Sections</b> — Shows column values as points on each line along a radius of the circle.  |
| Pie graph  | Includes these drop targets:  |
|  | ■ Pies — Shows each column value or column value combination as a separate pie  |
|  | ■ Slices — Shows each column value or column value combination as a separate slice of the pie   |
| Funnel graph   | Stage — Shows each column value as a stage in the funnel.   |

**Excluded** — Excludes columns from the view results but leaves the column as part of the analysis. See "Columns in the Excluded Drop Target" for more information.

In addition, each *<view-type>* area, with the exception of the Table area, contains the Measure Labels element. The Measure Labels element represents the labels for all the Measures columns in the drop targets in the Measures area. You can modify how measure labels are shown in a view by dragging it from one drop target and dropping it in another. For example, in a vertical bar graph, you can show each measure label in a different color by dragging and dropping the Measure Labels element to the Vary Color By drop target.

In pivot tables, you can also edit the format of measure labels or hide them.

**Columns in the Excluded Drop Target** A column in the Excluded drop target is not included in the view results but still remains as part of the analysis. A column can be placed in the Excluded drop target after views have been created for the analysis in various ways. A general rule is that a column is placed in the Excluded drop target for a view if it is not added explicitly to one or all views. The following list describes various scenarios for excluding a column that was selected from the Subject Areas pane to add to views in an analysis:

- Criteria tab If you add a column from the Subject Areas pane to the Selected Columns pane after displaying the Results tab, then you place the column in the Excluded drop target of the Layout pane for one or more existing views in the analysis. Views that you create after this addition will attempt to include all columns in their layout with as few columns as possible being placed in the Excluded drop target.
- Results tab The behavior might differ depending on whether you add columns to a view editor or to the Compound Layout:
  - View Editor If you add a column from the Subject Areas pane to a view, then you place the column in that view. The column is placed in the Excluded drop target for all other views in the analysis.
  - Compound Layout If you double-click a column in the Subject Areas pane, then you place the column in a default drop target of the Layout pane for all existing views in the current Compound Layout. The column is placed in the Excluded drop target for all other views in the analysis.

If you drag and drop a column from the Subject Areas pane to a tabular view, then you place the column in the drop target for that view. The column is placed in the Excluded drop target for all other views in the analysis.

If a column is in the Excluded drop target when you want it displayed in a view, then you can easily move it. Simply display the Layout pane for the view, and drag and drop the column from the Excluded drop target to the desired one.

Excluding columns differs from removing columns. You can use the **Remove Column** option from the **More Options** button in the Layout pane for a view to remove a column entirely from the analysis.

Aggregation and the Excluded Drop Target In a pivot table or graph that includes columns in the Excluded drop target, an aggregation rule is applied to aggregate measures in the data body of the view to a single value. For example, suppose that you have the following columns in the Selected Columns pane:

City Region Dollars NY 1000 East East Boston 500

If the City column is placed in the Excluded drop target, then the view typically displays the following:

```
East
        1500
```

The aggregation rule is applied to aggregate 1,000 and 500 into 1,500. In a pivot table or graph, the aggregation rule that is specified in the "Edit Column Formula dialog" applies. For a pivot table, you can select a specific aggregation rule using the More Options menu in the Layout pane.

Suppose that you wanted the table, pivot table, or graph to show the following values:

1000 East 500 East

To achieve this, include both Region and City columns in the view layout, but hide the City column using its "Column Properties dialog: Column Format tab".

**Drop Target Restrictions and Guidelines** The following restrictions and guidelines apply to dragging columns from one drop target and dropping them in another:

- A bubble graph requires at least three measures. Plot one measure on the horizontal axis, another measure on the vertical axis, and a third measure on the bubble size axis.
- In a bubble, line-bar, scatter, or funnel graph, you cannot drag and drop measure labels.
- A pareto graph can have only one measure.
  - If you drop another measure on the Measures drop target, then the measures are swapped; that is, the existing measure is replaced by the newly dropped measure and is moved automatically to the Excluded drop target.
- A time series line graph requires a single date or date-time data column to be selected on the horizontal axis. It has a single vertical axis, but supports multiple data series.
- A scatter graph requires at least two measures. For example, you can plot one measure column on the horizontal axis and another measure column on the vertical axis. These measures are plotted for values on the Group By axis.
- A funnel graph uses two measures but only one is required. If you do not select a second measure, the first measure will be used for the second measure. If you have selected two measures and then select a new measure, then the new measure will replace the measure currently in the Actual Measures drop target.

#### Adding and Rearranging Columns in Views

Using the editor for the view and the Layout pane, you can easily modify and change the order of columns via the following means:

- Drag and drop columns in tables and pivot tables to the desired positions in the editor using the handles and drop targets. For example, if you have two columns in the Rows section of a pivot table, reverse the order of the columns by dragging and dropping the first column after the second one. In a table, you can drag and drop columns, but you cannot stack columns, as you can in a pivot table.
  - You can also drag and drop columns in this way in the Compound Layout.
- Drag and drop columns in the Layout pane. A target is active and ready for the "drop" when it appears highlighted. When you hover the mouse pointer over a column in the Layout pane, the cursor state changes from the pointer to a move

cursor when you can "grab" the column and move it over a drop target. For example, you can easily move a column in a pivot table from the Rows drop target to the Sections target to create a unique pivot table for each value in the column.

For more information on drop targets, see the "Layout pane".

- Add a column to a graph or gauge. To do so, drag the column from the Subject Areas tab to the appropriate location in the view editor or to a drop target in the Layout pane.
- Remove columns in the Layout pane. For example, you can easily remove a column in a view by selecting **Remove Column** from the **More Options** button. Removing columns differs from excluding columns, which is described in "Understanding Drop Targets".

This list provides only a partial summary of where dragging and dropping can occur. You can drag and drop columns and catalog objects whenever you see the "Subject Areas pane" and "Catalog pane". You can also drag and drop items in views on dashboards. See "Columns in the Excluded Drop Target" for more information.

### Setting Properties for View Bodies and Drop Targets

In the Layout pane, you can click the **Properties** button to display a dialog in which you specify properties for the view body (such as Pivot Table) or for a drop target (such as Sections). For example, you can specify whether to display headings, set background color, and insert page breaks.

### To modify view body or drop target properties:

- In the view editor, display the Layout pane and click the **Properties** button beside the view body (for tables and pivot tables) or drop target name.
  - The Properties dialog for the view body or drop target is displayed.
- Complete the appropriate fields and click **OK**.

**Adding Totals to Tables and Pivot Tables** In the Layout pane, you can add totals for columns in tables and pivot tables. You can position the totals at various locations in the view. You can add totals for columns that are displayed on the various edges. For each measure, the total uses the aggregation rule for that measure. The default aggregation rule for a measure column is specified in the Oracle BI repository, or by the original author of the analysis.

#### To add totals to a view:

- Display the "Layout pane" for the view.
- To add grand totals to the entire view:
  - For a table, in the Columns and Measures drop target, click the **Totals** button, then click the location such as **Before**.
  - For a pivot table, in the Rows or the Columns drop target, click the **Totals** button, then click the location such as **After**.
- To turn on and off the totals that apply to all the values in the drop target, click the **Totals** button beside the drop target name, such as Sections. Then select the location for the total, such as **Before** the data items. A totals area is added to the view.
- For a measure column, click its **More Options** button, select **Aggregation Rule**, and select a value. The selected aggregation rule for the measure column is indicated by a check mark.

For an attribute column, click its **More Options** button and ensure that the **Report-Based Total** option is selected.

**Note:** If the **Report-Based Total** option is not selected, then the Oracle BI Server will calculate the total based on the entire result set, before applying any filters to the measure columns.

How Will Report-Based Totals Created in Previous Releases Be Upgraded? In previous releases, you had the ability to create report-based totals in table views. Because report-based totals are handled slightly differently in this release, you might notice a difference in totals as follows:

- If the previous table included all report-based totals, then all measure columns and attribute columns in the upgraded table will use the **Default** option with the Report-Based Total option.
- If the previous table view included a mix of report-based totals and non-report-based totals, then all measure columns and attribute columns in the upgraded table will use the **Default** option with the **Report-Based Total** option.
  - You can work around the upgraded totals manually. If you want to use the same measure value as in the previous release, then duplicate the measure column in the table and use the **Aggregation Rule** menu to specify a non-report-based total.
- If the previous table view included all non-report-based totals, then all measure columns and attribute columns in the upgraded table will continue to use non-report-based totals.

### Displaying Running Sums and Relative Values for Measure Columns in Pivot Tables

You can use the Layout pane to display running sums or the relative value of measure columns in pivot tables, as described in the following sections.

Displaying Running Sums for Measure Columns in Pivot Tables In a pivot table, you can display numeric measures as running sums, where each consecutive cell for the measure displays the total of all previous cells for that measure. This option is a display feature only that has no effect on actual pivot table results.

Typically, running sums are displayed for duplicated attribute columns or for measure columns for which the option to show data as a percentage of the column has been selected, with the last value being 100 percent. Running sums apply to all totals. The running sum for each level of detail is computed separately.

Column headings are not affected when the running sum option is selected. You can format the column heading if you want it to indicate that the running sum option is in effect.

The following usage rules are in effect for running sums:

- A running sum is incompatible with the SQL RSUM function (the effect would be a running sum of the running sum).
- All running sums are reset with each new section. A running sum does not reset at a break within a section or continued across sections.
- If a measure does not display in a single column or in a single row, then the measure is summed left to right and then top to bottom. (The lower right cell will contain the grand total.) A running sum does not reset with each row or column.

You cannot specify rolling minimums, maximums, and averages in the Layout pane. You can include these if administrators create formulas for them in the metadata repository.

### To display a measure as a running sum:

In the Layout pane for the pivot table, in the Measures area, click the **More** Options button for the row or column to be summed and select Display as Running Sum.

Displaying Relative Values for Measure Columns in Pivot Tables In a pivot table, you can dynamically convert a stored or calculated measure into a percent or an index. This shows the relative value of the item, compared to the total, without the need to explicitly create a calculated item for it. You can view the measure as a percentage between 0.00 and 100.00, or as an index between 0 and 1.

For example, if you are using a pivot table to examine sales by product, then you can duplicate the sales measure and view it as a percentage of the total. This enables you to see the actual sales, and the percentage of sales, that each product accounts for.

#### To show an item as a relative value:

1. In the Layout pane for the pivot table, click the **More Options** button for the item you want to show as a relative value.

**Note:** The following step is optional. When you duplicate the measure column in the pivot table, you can see both the total for the measure and its relative value. This eliminates the need to add the column twice on the Criteria tab to see the total and its relative value in the pivot table.

**2.** To duplicate the measure column, select **Duplicate Layer**.

The measure is displayed a second time in the pivot table, with the same name.

Click the More Options button, select Show Data As, select Percent of or Index **of**, then select the appropriate option.

**Note:** The **Show Data As** option is available only for items that are stored or calculated measures.

To rename the new column, click the **More Options** button, select **Format Headings** and in the Edit Format dialog, enter a value in the **Caption** field.

#### **Defining Section Sliders in Graphs and Gauges**

A section slider displays members of one or more attribute or hierarchical columns as values on a rectangular bar and provides mechanisms to select a value. You use a section slider to limit the data that is shown in a graph or gauge.

Figure 3–3 shows an example of a section slider. It displays the members of the Product Type column. Using this slider, for example, you can limit the data that is shown in a graph or gauge to a particular product type, such as Cell Phones.

Figure 3–3 Example of a Section Slider



A section slider consists of the following components:

**Slider bar** — Displays the members of one or more attribute or hierarchical columns as values along a rectangular bar.

> **Note:** The administrator configures the maximum number of values that can be displayed on the slider bar. However, you can set a maximum lower than the system maximum by setting the **Maximum** number of section slider values field in the "Section Properties dialog".

- Slider thumb Indicates the current value of the section slider. The thumb in Figure 3–3 indicates that the current value is Cell Phones. You can drag the thumb to the desired value.
- **Decrease button** Moves the slider thumb to the value to the left of the current value. For example, in Figure 3–3, clicking the decrease button (the second button from the left on the slider) moves the slider thumb to the value Camera.
- **Increase button** Moves the slider thumb to the right of the current value. For example, in Figure 3-3, clicking the increase page button (the right-most button on the slider) moves the slider thumb to the value Fixed.
- **Play button** Sequentially moves the thumb through the slider values. For example, in Figure 3–3, clicking the play button (the left-most button on the slider) moves the slider thumb to the value Fixed and then to Install, and so on. After being clicked, the play button changes to a pause button to allow you to stop on a particular value.

### To define a section slider in a graph or a gauge:

- Open the analysis that contains the graph or gauge in which you want to define a section slider.
- Click the "Analysis editor: Results tab".
- Click the **Edit View** toolbar button in the graph, funnel, or gauge view. The "Results tab: Graph editor", "Results tab: Funnel editor", or "Results tab: Gauge editor" is displayed.
- For each column that you want to be displayed on the section slider, in the "Layout pane" of the Graph or Gauge editor, drag and drop the column to the Sections drop target.
- Select **Display as Slider**.
- Click **Done** to close the editor and return to the Results tab.
- Click the **Save Analysis** toolbar button to save your changes.

## Modifying Values and Performing Write Back

Users of a dashboard page or an analysis might have the ability to modify the data that they see in a table. This ability is often referred to as "write back." Users can update a

value in the view that is written back to the record in the data source or is used in other views in the analysis.

For example, you can create an analysis that has Sales Quota Amount defined as a write back field, Sales Amount as a field from the data warehouse, and Percentage of Quota as a calculated field (Sales Amount/Sales Quota Amount). When viewing the analysis a user can modify the Sales Quota Amount and the Percentage of Quota field recalculates appropriately.

## About Modifying Values and Various Types of Users

The ability to modify values affects the following types of users:

- Administrators of the repository configure the columns in the repository to allow for write back.
- Administrators set privileges for write back and prepare a write-back template, and administrators and content designers configure for write back from table views in dashboards and analyses.
- End users modify records in table views.

### **Process for Write Back**

The following list describes the steps in the process of write back:

- As the content designer, you work with the administrator of the repository to assess the reporting needs in the organization and make a list of write-back columns needed and the analyses in which they should be displayed.
  - Hierarchical columns do not support the write-back capability but attribute columns, measure columns, and double columns do support the write-back capability. For double columns, you can write back to the display column. No automatic translation of the code column is provided.
- 2. The administrator of the repository configures the Oracle BI Server and the columns that should be available for write back, as described in *Oracle Fusion* Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.
- The administrator performs the following tasks:
  - **a.** Prepares a file of SQL code to use as the "template" for write back.
  - **b.** Grants appropriate privileges for setting up and using write back. For example, the administrator gives you the privileges to set up views in which users can modify values.

For information on the write-back template and on privileges, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

- As the content designer, you enable one or more columns for write back, as described in "Adding the Write-Back Capability to a Column".
- **5.** As the content designer, you enable a table view for write back, as described in "Adding the Write-Back Capability to a Table View".
- **6.** As the content designer, you provide users with information on working with write back, as described in "Modifying Data in a Table View in a Dashboard Page or Analysis".
- 7. Users modify the values in views as appropriate.

## Adding the Write-Back Capability to a Column

To enable the write-back capability for a column, administrators and content designers use the Write Back tab on the Column Properties dialog. Correct privileges must be set, and the attribute, measure, or double column must be set as writeable in the repository. Ensure that the column relates to the write-back template that the administrator prepared. All the table views that include that column can display it as available for write back.

### To enable the write-back capability for a column:

- Open the analysis for editing in the Criteria tab.
- Click the **Options** button beside a column on which you want to enable write back and select Column Properties.

The "Column Properties dialog" is displayed.

Click the Write Back tab.

If the column has been enabled for write-back in the repository, then the Enable Write Back box is available.

Click the **Enable Write Back** box.

Additional options for write-back are displayed.

- In **Text Field Width** box, specify the width of the column.
- Click **OK** to close the Column Properties dialog.

## Adding the Write-Back Capability to a Table View

To enable the write-back capability for a table view, use the Write Back tab of the Table Properties dialog.

#### To enable the write-back capability for a table view:

- In the Analysis editor, open the table view for editing.
- Click the **Table View Properties** toolbar button.

The "Table Properties dialog" is displayed.

- Click the Write Back tab.
- Ensure that the **Enable Write Back** box is selected.
- Select the **Template Name** box, then type the name of the template to employ for writing back values.

Check with the administrator for the appropriate template name.

Click **OK**.

## About the Modes for Write Back in Views

If you enable write back in a view and accept the system defaults, then a user has two modes in which to work with values:

- View mode: In this mode, a user simply views values. The user lacks the ability to modify values, before clicking the **Update** button to enter View mode.
- Edit mode: In this mode, a user actually modifies values. To enter Edit mode, the user clicks the **Update** button on the view, when it is available. When in Edit mode, the user enters data in columns and can click the following buttons:

- **Revert:** Changes back to the original values any modifications that the user has made but has not yet written back to the data source. Keeps the user in Edit mode.
- **Apply:** Writes back to the data source any changes that the user has made and refreshes the view to display the most current data based on those changes. Keeps the user in Edit mode.
- **Done:** Writes back to the data source any changes that the user has made, refreshes the view to display the most current data based on those changes, and returns the user to View mode.

You can modify the labels for these buttons using the options in the Write Back tab of the Properties dialog for the view. You can also use the **Toggle Table Mode** box to indicate that users do not toggle between View and Edit mode. Instead, they remain always in Edit mode. When toggling is disabled, the **Update** button is not displayed on the view.

## Interactions in Views

You can specify the types of interactions that are to occur when users click in a data view (that is, a table, pivot table, graph, funnel graph, gauge, or map). The following types of interactions are available:

- **None** Specifies that nothing happens when users click the column heading or a value. This option turns off drilling for attribute columns; it does not turn off drilling for hierarchical columns.
- **Drill** Allows users to drill down to more detailed information. See "Drilling in Views".
- Action Links Allows users to click a hot spot in a data view and then select an action link to execute an action, such as navigating to a saved analysis or invoking an Enterprise Java Bean (EJB). See Chapter 10, "Working with Actions."
- **Send Master-Detail Events** Sends master -detail events in a master-detail relationship. See "What is Master-Detail Linking of Views?" and "Linking Views in Master-Detail Relationships".

You create interactions at the criteria level using the "Column Properties dialog: Interaction tab". Interactions that you create take effect in all data views.

## How Will Interactions Created in Views in Previous Releases Be Upgraded?

In previous releases of Oracle BI EE, you could set up interactions at the view level, which allowed you to override the interactions that had been set up at the criteria level. In this release, you create all interactions at the criteria level. If you upgrade from a previous release, then all interactions will be moved to the measures at the criteria level and will take effect for all views.

For example, suppose that you had created an analysis in a previous release whose criteria was defined as Region, District, Dollars, and Units. In addition, you had created an interaction for a graph view. To upgrade the interaction for this release, the interaction will be moved to both Dollars and Units at the criteria level.

## **Drilling in Views**

If the administrator has configured columns for drilling in the subject area, then you can allow users to drill in data in tables, pivot tables, graphs, gauges, and maps.

Drilling is a way to navigate through data in views quickly and easily. This section provides the following information on drilling:

- "In Which Columns Can I Drill?"
- "How Do I Configure for Drilling?"
- "What are the Effects of Drilling on Filters and Selection Steps?"
- "Related Topics"

### In Which Columns Can I Drill?

You can drill in attribute columns and hierarchical columns. For information on drilling in columns, see "Drilling in Results".

## How Do I Configure for Drilling?

As the content designer, you specify whether users can drill in particular columns in views on dashboards. You control whether drilling is allowed in particular columns by specifying options in the "Column Properties dialog: Interaction tab".

## What are the Effects of Drilling on Filters and Selection Steps?

Drilling in columns affects their filters and selection steps as described in the following list. For more information, see Chapter 5, "Filtering and Selecting Data for Analyses."

**Hierarchical columns:** No steps are added to the selection when you expand or collapse members in a hierarchical column. That is, the expanding and collapsing does not change the selection of data for the column.

For example, suppose that you create a pivot table in which you select 2000 as the only member in the Time dimension, and you arrange the data so that this one Time member is the column header in the pivot table. You can expand to show quarters in 2000 and then the months in the last quarter. At this point the pivot table has child members for 2000, Q1 2000, Q2 2000, Q3 2000, Q4 2000, October 2000, November 2000, and December 2000. If you display the Selection Steps pane, however, you will see that the selection for the Time dimension still contains only the 2000 member.

Expanding and collapsing in a hierarchical column affects only that particular view. No other views are affected.

- Attribute columns: You can drill down from the row heading or column heading or from a member in an attribute column. Drilling on a heading adds the lower level to the view. Drilling on a member adds the lower level and affects both filters and selection steps:
  - Drilling on a member adds a filter for the current member, thereby limiting the results. For example, if you drill on CENTRAL\_REGION, you add the District column, which adds a filter that specifies that Region=CENTRAL\_REGION.
  - Drilling on a member adds the lower-level column to the analysis and updates the column in the Selection Steps pane without providing a step update during design.

## Related Topics

See the following topics that are related to drilling:

For information on drilling in maps, see "Drilling in Map Views".

- For information on configuring for drilling in views in dashboards, see "Adding Content to Dashboards".
- For information on configuring hierarchical columns for drilling, see *Oracle Fusion* Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence *Enterprise Edition.*

## **Sorting Data in Views**

When you create an analysis, you can specify sorting for the results that are displayed in graphs, pivot tables, and tables.

## Common Sort Functionality

Some sort functionality is common to graphs, pivot tables, and tables, although you cannot sort values interactively on a graph.

Graphs, pivot tables, and tables reflect the sorting that you specify in the Selected Columns pane of the Criteria tab for attribute columns and hierarchical columns. Use the Sorting menu options that are available from the **Options** button for a column. These sorting options provide the ability to sort by a single column or by multiple columns, each in either ascending or descending order. By creating sorts for multiple columns, you can specify multiple level sorts such as second-level and third-level sorts of the data. These sort levels are indicated with numbers and a sort icon for the column in the Criteria tab.

The options that you specify on the Criteria tab serve as the initial sorting state of the analysis. You can modify the sort later when the analysis is used in a table or pivot table.

When you sort items in a hierarchical column, you always sort within the parent. That is, children are never sorted outside of their parent. The children are displayed below the parent in the proper sort order; the parent is not sorted within its children.

If you include totals in a view, then those values are not sorted. They remain in the location in which you placed them, regardless of sorting.

If you sort an attribute column or hierarchical column that includes a group, then that group is always displayed at the bottom of the list. If there is more than one group, then the groups are listed in the order in which their corresponding steps are specified in the Selection Steps pane.

### Where Can I Sort?

The sort options in the various places allow you quickly to sort rows and columns of a view, either from lowest to highest data values, or from highest to lowest. You can also return the order to the order in the data source by clearing all sorts. You can specify alphanumeric sorts on the row and column edges of pivot table views and table views.

You specify sorting in the Selected Columns pane of the Criteria tab. You can also sort data in pivot table views and table views. When you display the view, the Sort Ascending and Sort Descending buttons in the column header or the row header are displayed in the shape of triangles. Use these buttons to override the sorts that were specified with the Sorting menu options. You can right-click an innermost column header in a pivot table to display the same Sorting menu options that are available in the Selected Columns pane. Any sorting options that you specify in the view override those that were made in the Selected Columns pane.

### **Sorting Data**

Using the "Sorting Options Menu and Buttons", you make sorting specifications in various ways, including those in the following list:

- Click the **Options** button beside the column and select the appropriate sort option, in the Selected Columns pane of the Criteria tab.
- Right-click and select the appropriate option from the menu, or use the sort buttons in the column header or the row header in the following locations:
  - In the pivot table or table in the Compound Layout.
  - In the view in the Pivot Table editor or Table editor.
  - In the pivot table or table in a dashboard.

If you see a shaded-in sort button in the column header or the row header of a pivot table or table, then you know that the column contains a primary sort. You can add a second-level or third-level sort by hovering over another innermost column header or row header and clicking the right-mouse button.

### Clearing Sorts

You can use various methods to clear sorts that have been applied directly in a pivot table or table, including those in the following list:

- Click a sort button in an unsorted column to remove the primary sort from the column to which it now applies and apply it to the column whose button you just clicked.
- Select the **Clear All Sorts** option from the right-mouse menu.
- Swap edges in a pivot table.

### Example 1: Sorting with a Single Column on Each Edge

Suppose that you have a pivot table with Time Hierarchy on the Columns edge and H2 Offices on the Rows edge; both are hierarchical columns. 1-Revenue in dollars is the measure that is shown in the pivot table. You can sort H2 Offices by the Revenue for a particular year as highest revenue to lowest revenue, or lowest to highest, or no sorting at all.

Figure 3–4 shows an example of sorting H2 Offices by Revenue for year 2008, in ascending order. The Offices Total parent is always displayed above its children. The values for other years might not sorted numerically, because only year 2008 was selected.

Figure 3-4 Sorting Example: H2 Offices for Year 2008

|                 | 1- Revenue        |             |  |
|-----------------|-------------------|-------------|--|
|                 | ± 2008 <b>△</b> ▽ | ± 2009      |  |
| H2 Offices      |                   |             |  |
| ⊡ Offices Total | 16500000.00       | 15000000.00 |  |
|                 | 4574096.11        | 3999835.76  |  |
| ⊕ Genmind Corp  | 5470146.00        | 5036331.13  |  |
| ⊕ Tescare Ltd.  | 6455757.89        | 5963833.11  |  |

Figure 3–5 shows an example of sorting the Time Hierarchy by the Revenue for Offices Total. The years are re-arranged in the order 2009 and 2008. In 2009, Offices Total had its lowest value; and in 2008, it had its highest value.

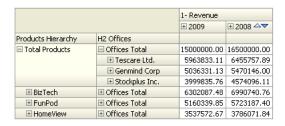
Figure 3–5 Sorting Example: Time Hierarchy by Revenue

|                               | 1- Revenue  |             |  |
|-------------------------------|-------------|-------------|--|
|                               | ± 2009      | ± 2008      |  |
| H2 Offices △▼                 |             |             |  |
| ☐ Offices Total ◀ ▷           | 15000000.00 | 16500000.00 |  |
| ⊞ Genmind Corp                | 5036331.13  | 5470146.00  |  |
| Tescare Ltd.     Tescare Ltd. | 5963833.11  | 6455757.89  |  |
|                               | 3999835.76  | 4574096.11  |  |

### Example 2: Sorting with Two Columns on the Row Edge

Suppose that you have a pivot table with the Time Hierarchy on the Columns edge and both the Products Hierarchy and H2 Offices on the Rows edge, with Products outside H2 Offices. 1-Revenue in dollars is the measure that is shown in the pivot table. You can sort the Rows edge by the Revenue for 2008 in descending order. The H2 Offices are sorted as in Example 1, but the Products are not sorted, because they are in the outermost layer. See Figure 3–6.

Figure 3–6 Sorting Example: Two Columns on Row Edge



### Example 3: Sorting with Two Measures on the Column Edge

Suppose that you have a pivot table with the Time Hierarchy on the Columns edge and H2 Offices on the Rows edge. Both 1-Revenue and 2-Billed Quantity are the measures that are shown in the pivot table. If you try to sort the years by the leaf-node for GenMind Corp (in ascending order), then the first measure on the column edge (reading left to right) is chosen as the one on which to sort. If Revenue is the first measure on the edge, then the pivot table is sorted as shown in Figure 3–7.

Figure 3-7 Sorting Example: Two Measures on Column Edge

|  | 1- Revenue  |                         | 2- Billed Quantity |         |
|--|-------------|-------------------------|--------------------|---------|
|  | ± 2009      | <b>±</b> 2008 <b>△▽</b> | ± 2009             | ± 2008  |
| H2 Offices   |             |                         |                    |         |
| ☐ Offices Total  | 15000000.00 | 16500000.00             | 1612472            | 1773791 |
|  | 5963833.11  | 6455757.89              | 636186             | 685653  |
| ⊞ Genmind Corp      ■ Denmind Corp    ■ De | 5036331.13  | 5470146.00              | 538959             | 589879  |
|  | 3999835.76  | 4574096.11              | 437327             | 498259  |

If the measure labels are on the Rows edge and you sort by a year, then the top-most measure is used for sorting. No ambiguity exists if the measure labels are on the Columns edge and you sort by a year.

# How Will Sort Specifications Created in Previous Releases Be Upgraded?

In previous releases of Oracle BI EE, you could create sorts for columns in views. If you upgrade from a previous release, then you might notice that the views are sorting the columns slightly differently, which is likely due to changes in the default sort order. In addition, in the current release, the following apply:

- If a primary sort was specified on a measure column in the previous release, then when the analysis is upgraded, that primary sort is ignored for a pivot table and the default sort order for pivot tables in the current release is used.
- A pivot table always sorts each edge from outer to inner by default, which differs from the previous release.
- Pivot tables and graphs use only the sort order that is specified on the Criteria tab, except for measure columns. Sorts that you specify for measure columns on the Criteria tab are ignored.

### Saving Views

You can save a view that you are working with at any time. To save a view, you must save the analysis.

#### To save a view:

- **1.** If you want to save a view:
  - In a new analysis or in an existing analysis, click the **Save Analysis** toolbar button in the "Analysis editor".
  - In an existing analysis that you want to save as another name, click the **Save As** toolbar button in the "Analysis editor".

If this is the first time that you are saving the analysis, or you are saving an existing analysis as another name, then the "Save As dialog" is displayed where you specify the information for saving the analysis.

# **Rearranging Views**

You can use your mouse to rearrange a view (for example, title, legend, table, or graph) within a compound layout.

#### To rearrange a view:

- Place the cursor just inside the top edge of the view to be rearranged.
- Click and hold the left mouse button (if configured) on the view.
  - The view is displayed as a transparent moveable object.
- Use the mouse to drag the view to the required position.

A view can be rearranged as follows:

- At the boundary of a view.
  - Each view has four boundaries (upper, lower, left or right), and can be arranged alongside the boundaries of other views in an analysis. You can drag and drop a view to display it next to the boundary of another view.
- At the outer boundary of the compound layout.
  - Each compound layout contains one or more views arranged in either a square or a rectangle. The compound layout has four boundaries (upper, lower, left and right). You can drag and drop a view to the outer boundary of an compound layout. This action will display the view across the entire length or breadth of the compound layout.
- Release the mouse button.

The view is rearranged in the compound layout in the position that is indicated by the blue bar.

Repeat the previous steps to rearrange further views.

### **Printing Views**

You can print views using HTML or Adobe PDF (Portable Document Format). Adobe Reader 6.0 or greater is required to print using Adobe PDF.

You can also specify PDF and print options, including adding headers and footers. For more information on printing, see "Changing Print Options for Views"

**Note:** The HTML method of printing relies on the print handling capabilities of your browser. If you do not get the results you want, then choose PDF to open and then print the analysis.

#### You can print:

- A single view from the view's editor
- An assemblage of views that are displayed in the "Compound Layout"

#### To print a single view or an assemblage of views:

- **1.** If you want to print:
  - A single view, in the toolbar of the view's editor, click the **Print this analysis** button.
  - The assemblage of views displayed in the Compound Layout, in the "Analysis editor: Results tab" toolbar, click the Print this analysis button.
- Select Printable HTML or Printable PDF.
  - For HTML, a new window shows the view or views to print. From the File menu, select **Print**.
  - For PDF, an Adobe PDF window shows the view or views to print. Use the options that are available in the Adobe PDF window to save or print the file.

### **Changing Print Options for Views**

#### To change print options:

- 1. In the "Analysis editor: Results tab" toolbar, click the **Print Options** button. The "Print Options dialog" is displayed.
- Specify the appropriate options in the dialog, and click **OK**.

### Previewing How Views Will Be Displayed on a Dashboard

You can preview views to see how they will be displayed on a dashboard. You can preview:

- A single view from the view's editor
- An assemblage of views displayed in the "Compound Layout"

#### To preview a view:

- 1. If you want to preview:
  - A single view, in the toolbar of the view's editor, click the **Show how results** will look on a Dashboard button.
  - The assemblage of views that are displayed in the Compound Layout, in the "Analysis editor: Results tab" toolbar, click the Show how results will look on a Dashboard button.

**Note:** If the **Show how results will look on a Dashboard** button is not available, then the administrator has suppressed its display.

The dashboard preview is displayed in a new window. Any prompts will be displayed and applied in the preview.

# **Removing Views**

You can remove a view from:

A compound layout.

Removing a view from a compound layout removes it only from the compound layout, not from the analysis.

An analysis.

Removing a view from an analysis removes the view from the analysis as well as from any compound layout to which it had been added.

#### To remove a view:

- **1.** If you want to remove a view from:
  - A compound layout, in the view in the "Compound Layout", click the **Remove** View from Compound Layout button.
  - An analysis, in the "Views pane", select the view and then click the **Remove** View from Analysis toolbar button.

### Refreshing the Results in Views

When you are working with views that show results data, such as the table and pivot table, you can refresh the results of the current analysis. Refreshing results is useful if you make a change such as adding a filter that limits results and you want to see the effects of your change.

#### To refresh the results of the current analysis:

In the "Analysis editor: Results tab" toolbar, click the Refresh the results of the current analysis button.

# **Customizing Views for Delivery to Agent Users**

Delivery content is automatically formatted based on the destinations that you specify in the "Agent editor: Destinations tab". You can manually control which view or views are sent to a particular destination by including them in a compound layout. For example, you might want to create a view that contains mostly text and add that view

to a compound layout, if you will deliver it to a mobile phone. In previous releases, this functionality was referred to as "specialized views."

#### To control which compound layout is sent to a particular destination:

- For the appropriate analysis, create and save the view to use for delivered content.
- In the toolbar of the "Analysis editor: Results tab", click the Create Compound Layout button.
- Add the view that you created to the newly created compound layout.
- **4.** In the toolbar of the "Analysis editor: Results tab", click the **Edit Analysis Properties** button.
- 5. In the View for Text Delivery box, select the compound layout to which you added the view.
- Click OK.

# What is Master-Detail Linking of Views?

Master-detail linking of views allows you to establish a relationship between two or more views such that one view, called the master view, will drive data changes in one or more other views, called detail views.

For example, suppose you have the following two views:

- A table that shows Dollars by Region
- A graph that shows Dollars by Brand with Region on a section slider

Using the master-detail linking functionality, you can link the two views so that when you click a particular Region in the table, the Region on the section slider of the graph as well as the data in the graph changes to reflect the Region that was clicked on the table. For example in Figure 3–8, clicking CENTRAL REGION in the table, positions the thumb in the section slider on CENTRAL REGION and updates the data in the graph to the data for the CENTRAL REGION.



Figure 3-8 Master-Detail Linking of Views

#### What Are Master Views?

A master view drives data changes in one or more detail views. A view becomes a master when you set up the interaction of a column in the view to send master-detail events on designated channels. This column is known as the master column.

The master column is the column whose values when clicked will send a master-detail event, which passes information to update the data in a detail view.

The following types of views can be master views:

- Graph
- Funnel graph
- Gauge
- Map
- Pivot table
- **Table**

A master view can be in the same analysis as the detail view or in a different analysis. A master view can update data in one or more detail views.

### What Types of Columns Can Be Master Columns

Any type of column — hierarchical, attribute, or measure — can be a master column. However, the master column cannot be displayed on the page edge or the section slider in the master view. It must be displayed in the body of the view.

**Note:** While hierarchical columns are supported as master columns, if a user clicks a hierarchy level, then a change will take effect in the detail view only if the level is expanded there as well.

#### What Information Do Master-Detail Events Pass?

When a master-detail event is raised, it passes the definition of the cell (or item) in the master view that was clicked. The specific information it passes depends on the type of column:

For an attribute column, it passes the clicked value as well as the contextual information to the left and above the axis member.

For example, in Figure 3–9, if the attribute column District is the master column, and you click CHICAGO DISTRICT (highlighted in blue), then the master-detail event information passed is Region = CENTRAL REGION and District = CHICAGO DISTRICT.

District Year Dollars Region 19692832.00 CENTRAL REGION | CHICAGO DISTRICT 1998 1999 25867519.00 4724882.00 2000 CINCINNATI DISTRICT 8498534.00 1998 1999 15532165.00 2000 2746673.00 DETROIT DISTRICT 1998 12759139.00 17044339.00 1999 2000 2989860.00 KANSAS CITY DISTRICT 1998 8189375.00 12830699.00 1999 2000 2261045.00 MINNEAPOLIS DISTRICT 1998 3863260.00 1999 5224101.00 687417.00 2000 EASTERN REGION | BOSTON DISTRICT 1998 25111204.00 1999 35648693.00 5842884.00 2000 NEW YORK DISTRICT 1998 24853566.00 1999 58226875.00 2000 9164261.00

Figure 3–9 Master-Detail Event Information for an Attribute Column

For a measure column, it passes all the contextual information for the data value.

For example, in Figure 3–10, if the measure column Dollars is the master column, and you click 4724882.00 (highlighted in blue), then the master-detail event information passed is Region = CENTRAL REGION, District = CHICAGO DISTRICT, and Year = 2000.

Region District Year Dollars CENTRAL REGION | CHICAGO DISTRICT 1998 19692832.00 1999 25867519.00 2000 4724882.00 CINCINNATI DISTRICT 1998 8498534.00 1999 2000 15532165.00 2746673.00 DETROIT DISTRICT 1998 12759139.00 1999 17044339.00 2000 2989860.00 KANSAS CITY DISTRICT 1998 8189375.00 1999 12830699.00 2000 2261045.00 MINNEAPOLIS DISTRICT 1998 3863260.00 1999 5224101.00 2000 687417.00 1998 25111204.00 EASTERN REGION BOSTON DISTRICT 1999 35648693.00 2000 5842884.00 NEW YORK DISTRICT 1998 24853566.00 1999 58226875.00 2000 9164261.00

Figure 3-10 Master-Detail Event Information for a Measure Column

The master-detail event information defines the position of a page edge or a section slider in a detail view.

#### What Are Channels?

A channel links a master view to a detail view. It is the vehicle that carries master-detail events from the master view to the detail view. The same channel must be used for both the master view and the detail view in a master-detail relationship, for example, Channel1.

### What Are Detail Views?

A detail view is a view that listens for and responds to master-detail events sent by a master view on a specified channel. A view becomes a detail view, when you set up the view to listen to master-detail events.

A detail view includes one or more columns whose values will be changed directly by the information passed by a master-detail event. These columns are known as detail columns. A detail column must:

- Be on the page edge or the section slider of the detail view. Whether a detail column is displayed on the page edge or a section slider, depends on the type of view:
  - For pivot tables and tables, it must be on the page edge
  - For graphs and gauges, it can be on the page edge, or on the section slider

**Note:** If a detail column is on a section slider and a page edge is present, the detail column will not be updated by the information in the master-detail event. For example, if the information in the event is Region=CENTRAL and Year=2009, and the page edge of the detail view has Region and the section slider has Years, then only the Region will be updated.

Match a column in the master view

When a detail view contains multiple detail columns, it is listening for and responding to master detail events on multiple channels.

The following types of views can be detail views:

- Graph
- Funnel graph
- Gauge
- **Table**
- Pivot table

#### A detail view:

- Can listen for master-detail events from multiple master views
- Can be in the same analysis as the master view or in a different analysis
- Cannot act as a master to another view

### How Does Master-Detail Linking of Views Work?

When a master view and a detail view are linked and a user clicks a cell (or item) in the master column, a master-detail event is generated on the designated channel and the master-detail event information is passed to the detail view.

The detail view (which is listening on the designated channel for master-detail events) receives the event and the master-detail event information. It reviews the master-detail event information to determine which column in this information matches the detail column. When it finds a match, it takes the column values in the master-detail event information, updates the detail column, and then refreshes the entire detail view.

**Note:** If a master column is on a section slider, then any detail view that is not visible initially in the browser is not updated and refreshed until the view becomes visible when you scroll down. For more information on section sliders, see "Defining Section Sliders in Graphs and Gauges".

For an example of how master-detail linking of views works, see "Example of a Table and Graph Linked in a Master-Detail Relationship".

# **Linking Views in Master-Detail Relationships**

To link views in master-detail relationships, you must define the master view and the detail view.

For more information on master-detail linking, see "What is Master-Detail Linking of Views?"

### **Defining the Master View**

To define a view as a master view:

1. Create or edit the analysis whose view (or views) you want to define as the master view.

- 2. For the column that is to be the master column, in the "Analysis editor: Criteria tab", click the Options button and then select Column Properties. The "Column Properties dialog" is displayed.
- **3.** Click the "Column Properties dialog: Interaction tab".
- In the **Primary Interaction** box in the **Value** area, select **Send Master-Detail Events**. The **Specify channel** field is displayed.
- 5. In the **Specify channel** field, enter a name for the channel on which the master view will send master-detail events. You can use any name that you want, for example, Sales Analysis Channel, Channel 1, or channel 1.
- Add the view that you want to use as a master view. Note that any view that you add that includes the master column can be used as a master view.
- **7.** Click **OK**.

### Defining the Detail View

To define a view as a detail view:

- 1. Create or edit the analysis whose view you want to define as the detail view.
- **2.** Create the view that is to be the detail view, for example, a graph.
- **3.** Edit the view.
- Click the view's Property button in the toolbar of the view's editor. For example for a graph, click the **Graph Properties** toolbar button in the Graph Editor. The view's property dialog is displayed, for example, for a graph, the "Graph Properties dialog".
- 5. In the "Graph Properties dialog: General tab" (for graph or funnel graph), the "Gauge Properties dialog: General tab" (for a gauge), the "Table Properties dialog: Style tab" (for a table), or the "Pivot Table Properties dialog" (for a pivot table, select the Listen to Master-Detail Events box.
- **6.** In the **Event Channels** field, enter the name of the channel on which the detail view is to listen for master-detail events. The name must match (including case) the name of the channel on which the master view will be sending master-detail events. (For more information on the channel in the master view, see "Defining the Master View".
- **7.** Click **OK**.
- In the "Layout pane", drag the column (or columns) that you want to be the detail column (or columns) to either the Prompts drop target or the Section drop target as follows:
  - If the detail view is a pivot table or table, then drag the column or columns to the Prompts drop target.
  - If the detail view is a graph or a gauge, then drag the column or columns to the Prompts drop target or to the Sections drop target, whichever you prefer, unless the graph or gauge already has a column on the Prompts drop target. Then, you must drag the column or columns to the Prompts drop target.

**Note:** You must drag and drop all detail columns to the same drop target. You cannot have some on the Prompts drop target and some on the Section drop target.

For more information on drop targets, see "Understanding Drop Targets".

9. If you dragged and dropped one or more detail columns to the Section drop target, then select the **Display as Slider** box.

### Example of a Table and Graph Linked in a Master-Detail Relationship

In this example, a table, Regional Sales Master View, is linked to a graph, Regional Sales View Detail View, in a master-detail relationship.

#### About the Regional Sales Master View

The analysis for the master view contains the Region and Dollars columns. The Dollars column is set up as the master column as shown in Figure 3–11. The view that was added to be the master view is a table.

Figure 3-11 Example of Defining a Master View



#### About the Regional Sales Detail View

The analysis for the detail view contains the Region, Brand, and Dollars columns. The view that was added to be the detail view is a horizontal bar graph and is set up to listen for master-detail events on Channel1, as shown in Figure 3–12.

Graph properties General Style Scale Titles and Labels Canvas Width 640 Pixels Canvas Height 330 Pixels Legend Location Default (Right) Enable for Vertical Axis Listen to Master-Detail Events Event Channels Channel1 Animate graph on Display OK Cancel Help

Figure 3-12 Setting up to Listen to Master -Detail Events

The Region column is set up to be the detail column. This was done by dragging and dropping the Region column to the Graph Prompts drop target in the Layout pane as shown in Figure 3–13. (Notice that the Region column is then displayed on the page edge in the table.)

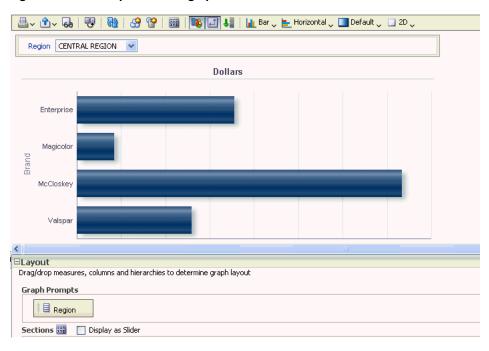


Figure 3–13 Example of Setting up the Detail Column

### How the Master-Detail Linking Works for Regional Sales Master View and Regional Sales Detail View

When a user clicks on the cell that contains the dollars for the Eastern region in Regional Sales Master View, the view sends a master-detail event on Channel1 and passes the master-detail event information of Region = EASTERN REGION.

Regional Sales Detail View, which is listening on Channel1, receives and reviews the master-detail event information. It determines that the Region column matches a

column on its page edge, updates the page edge to EASTERN REGION, and refreshes the entire view as shown in Figure 3–14.

Regional Sales Master View Regional Sales Detail View Region EASTERN REGION V 
 Region
 Dollars

 CENTRAL REGION
 143290854.00

 EASTERN REGION
 280403304.00
 SOUTHERN REGION 147722434.00 WESTERN REGION 205550830.00 ■ Dollars McCloskey Valspar

60M

90M

120M

150M

180M

30M

OM

Figure 3–14 Master Detail Relationship: Regional Sales Master View and Regional Sales Detail View

# **Building and Using Dashboards**

This chapter describes dashboards and explains how to build and use them. It contains the following topics:

- "What Are Dashboards?"
- "Who Creates and Edits Dashboards?"
- "What Is the Dashboard Builder?"
- "What Controls the Look of a Dashboard?"
- "Creating Dashboards"
- "Editing Dashboards"
- "Adding Oracle BI Publisher Reports to Dashboard Pages"
- "Changing the Properties of a Dashboard and its Pages"
- "Changing the Properties of Objects Added to Dashboard Pages"
- "Deleting Objects on Dashboard Pages"
- "Deleting Dashboard Pages"
- "Saving Dashboards By Other Names and In Other Locations"
- "Opening and Using Dashboards"
- "What Are Saved Customizations for Dashboard Pages?"
- "Saving Customizations"
- "Applying Saved Customizations"
- "Editing Saved Customizations"
- "Clearing Your Current Customization"
- "About Dashboard Template Pages for New Users"
- "Creating Dashboard Template Pages for New Users"
- "Publishing Dashboard Pages"
- "About Creating Links to Dashboard Pages"
- "Creating Links to Dashboard Pages"
- "Working with Briefing Books"

### What Are Dashboards?

Dashboards provide personalized views of corporate and external information. A dashboard consists of one or more pages.

Pages can display anything that you can access or open with a Web browser, including the following:

The results of analyses

The results of an analysis is the output returned from the Oracle BI Server that matches the analysis criteria. It can be shown in various views, such as a table, graph, and gauge. Users can examine and analyze results, print as PDF or HTML, save as PDF, or export them to a spreadsheet.

- Alerts from agents
- Action links and action link menus
- **Images**
- Text
- Views of folders in the Oracle BI Presentation Catalog
- Links to Web sites
- Links to documents
- Embedded content (such as Web pages or documents)
- Oracle BI Publisher reports

When you open a dashboard, the content of the dashboard is displayed in one or more dashboard pages. Dashboard pages are identified by tabs across the top of the dashboard. A toolbar at the top right contains buttons that let you:

- Edit the dashboard, if you have the appropriate permissions and privileges. For more information on the Dashboard Builder, see "What Is the Dashboard Builder?"
- Display various options for working with a "Dashboard page", such as printing the current page. See "Opening and Using Dashboards".

### Who Creates and Edits Dashboards?

The ability to create dashboards is controlled by the Manage Dashboard privilege, which is managed by the administrator.

Dashboard editing, which is performed in the "Dashboard builder", is allowed for users with the appropriate permissions and privileges to the dashboard and to objects that can be added to a dashboard page. For more information, see "Assigning Permissions". For information about administering privileges, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

### What Is the Dashboard Builder?

The Dashboard builder lets you add dashboard pages to a dashboard and edit the pages in a dashboard. You can add objects to and control the layout of dashboard pages.

Pages contain the columns and sections that hold the content of a dashboard. Every dashboard has at least one page, which can be empty. Dashboard pages are identified by tabs across the top of the dashboard. Multiple pages are used to organize content. For example, you might have one page to store results from analyses that you refer to every day, another that contains links to the Web sites of your suppliers, and one that links to your corporate intranet.

The objects that you can add to a dashboard page include:

- **Dashboard objects** Items that are used only in a dashboard. Examples of dashboard objects are sections to hold content, action links, and embedded content that is displayed in a frame in a dashboard. See Table B-2, "List of Dashboard Objects".
- Catalog objects Objects that you or someone else has saved to the Oracle BI Presentation Catalog (for example, analyses, prompts, and so on) and for which you have the appropriate permissions.

In a dashboard, the results of an analysis can be shown in various views, such as a table, graph, and gauge. (The results of an analysis are the output that is returned from the Oracle BI Server that matches the analysis criteria.) Users can examine and analyze results, save or print them, or export them to a spreadsheet.

### What Controls the Look of a Dashboard?

The look of a dashboard, such as background colors and the size of text, is controlled by:

- Skins Skins control the way the Oracle BI EE interface is displayed, such as background colors, corporate logos, and the style sheets to use. Skins can be automatically assigned to users when they log on. Administrators can customize the default skin and create new skins.
  - For information about skins, see Oracle Fusion Middleware System Administrator's *Guide for Oracle Business Intelligence Enterprise Edition.*
- Styles Styles control how dashboards and results are formatted for display, such as the color of text and links, the font and size of text, the borders in tables, the colors and attributes of graphs, and so on. Styles are organized into folders that contain Cascading Style Sheets (files with a .css extension), images, and graph templates. Administrators can customize some style sheets and create new style sheets. Users can override some elements in style sheets, such as table borders and text size, when formatting results in the Results tab.
  - For information about styles, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.
- **Cosmetic formatting** Cosmetic formatting affects the visual appearance of results and dashboards. You can apply it to results, columns, and sections.
  - For more information, see "Applying Formatting to Dashboard Pages".

# **Creating Dashboards**

You use the "Dashboard builder" to create (and edit) dashboards. For more information on dashboards, see "What Are Dashboards?"

#### To create a dashboard:

1. In the global header, click **New**, then select **Dashboard**.

The "New Dashboard dialog" is displayed.

- In the dialog, enter a name and description for the dashboard.
- Select the location for the dashboard.

**Note:** If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/first level subfolder, then the dashboard will be listed in the **Dashboard** menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), then it will not be listed.

If you choose a folder in the Dashboards subfolder directly under /Shared Folders/first level subfolder in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose a folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to /Shared Folders/Sales/Dashboards. (A new "Dashboards" folder is not automatically created if you choose a folder at any other level.)

- 4. Specify whether you want to add content to the new dashboard now or later.
- 5. Click OK.

If you specified that you want to add content:

Now, then the new dashboard, which contains one blank page, is displayed in the "Dashboard builder" for editing.

Later, then an empty dashboard is created (but not displayed) to which you can add content later.

# **Editing Dashboards**

You can edit dashboards to which you have appropriate permissions and privileges.

#### To edit a dashboard:

- In the global header, click **Catalog** to display the "Catalog page".
- 2. Navigate to the dashboard that you want to edit and click the **Edit** link. The dashboard is displayed in the "Dashboard builder".
- Perform one or more of the following tasks, as needed:
  - Add a dashboard page. See "Adding New Pages to Dashboards".
  - Delete a dashboard page. See "Deleting Dashboard Pages".
  - Add content. See "Adding Content to Dashboards".
  - Use the options available on the **Tools** toolbar button of the Dashboard builder to:
    - Set dashboard and dashboard page properties.
    - Specify page settings, and header and footer content for the PDF output, when printing a dashboard.
    - Set the report links for a dashboard page.

- Specify whether to allow users to create personal saved customizations on the page.
- Publish the page to a shared dashboard location so that you can share the page with others. See "Publishing Dashboard Pages".

For more information about these options, see "Dashboard builder".

- **4.** Perform one of the following steps at any time:
  - To preview the dashboard page, click the **Preview** toolbar button.
  - To save your changes, click the **Save** toolbar button.
  - To exit the Dashboard builder and return to the Dashboard, click **Run**.

### Adding New Pages to Dashboards

You can add new pages to dashboards.

#### To add a new page to a dashboard:

- 1. Edit the dashboard. For information, see "Editing Dashboards".
- Click the **Add Dashboard Page** toolbar button in the Dashboard builder. The "Add Dashboard Page dialog" is displayed.
- **3.** In the dialog, enter a name and description for the page, and click **OK**. The page is displayed as a new tab in the "Dashboard builder".
- Click the **Save** toolbar button.

After you add a new page, you can add content to it. See "Adding Content to Dashboards".

### Adding Content to Dashboards

You can add the following content to dashboards:

- Dashboard objects, including objects that let you lay out the content, such as columns and sections, as well as objects such as text, folders, action links, and so on. Table B-2 lists and describes the dashboard objects that you can include on a dashboard page.
- Objects that you or someone else has saved to the Oracle BI Presentation Catalog and for which you have the appropriate permissions, such as analyses, prompts, and so on.

**Note:** Dashboard modification is reserved for users with the appropriate permissions and privileges.

#### To add content to a dashboard:

- Edit the dashboard. For information, see "Editing Dashboards".
- Add the objects that you want to include on the page. To add an object, select it from the "Dashboard Objects pane" or the "Catalog pane", and then drag and drop the object to the "Page Layout area".

For information on dragging and dropping objects, see "Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder".

**Tip:** To locate an object in the Catalog pane, you can browse either by the catalog folder in which the object is stored or by the dashboard on which the object is displayed.

For information on adding Oracle BI Publisher reports, see "Adding Oracle BI Publisher Reports to Dashboard Pages".

When you drag and drop a scorecard object to the Page Layout area, the "Dimension Pinnings dialog" might be displayed, where you pin (or set) values for KPI dimensions that are associated with the scorecard object.

**3.** Set the properties of each object, as appropriate. To do so, hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Properties** button.

What is displayed depends on the type of object. For some objects, a properties dialog is displayed. For other objects, a menu of options is displayed. For more information, see "Properties Buttons for Objects".

Click the **Save** toolbar button.

#### Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder

When you drag and drop objects to the "Page Layout area" of the "Dashboard builder", keep in mind the following:

- As you drag an object in the Page Layout area, a blue bar is displayed to indicated the drop location relative to another object. When you hover over a valid target in which to drop the object, the border of the target container changes to orange.
- When you drop an object that does not already have a name to the Page Layout area, it is assigned a default name, such as Section 1, Link 1, and so on. You can rename some objects to assign meaningful, descriptive names.
- When you hover the mouse pointer over an object that has already been dropped to the Page Layout area, it is highlighted with an orange border and its toolbar is displayed.
- Columns are used to align content, while sections within columns hold the actual content. If you drag and drop an object to an empty Page Layout area, or drag and drop an object to a column without first adding a section to hold it, then the proper containers for it are created automatically. For example, if you drag and drop a section to an empty Page Layout area, a column is created automatically. If you drag and drop an analysis, then both the column and section are created automatically.
- When you drag and drop an analysis to the Page Layout area, the compound view is shown by default. If you want to show another view, then click the **Properties** button for the analysis, select **Show View**, and select the view that you want.
- When you drag a second object to a section, you can drop it either horizontally or vertically within the section, which sets the layout for the section. Additional objects that you drag and drop will have that layout. To change the layout after it has been set, you can use the Horizontal Layout and Vertical Layout buttons on the section toolbar.
- If you drag a section from one column into another column, then any content in that section is also included.

### Adding Oracle BI Publisher Reports to Dashboard Pages

This section describes how to add Oracle BI Publisher reports to dashboard pages. It contains the following topics:

- "How Do Oracle BI Publisher Reports and Dashboard Pages Interact?"
- "Adding Reports to Dashboard Pages"
- "Using Prompts with Parameterized Reports"

**Note:** If you use Microsoft's Internet Explorer browser version 7, then you might experience problems viewing BI Publisher reports that are embedded in analyses or dashboards, depending on the privacy settings of the browser. When you display the page from Oracle BI EE in the browser, you might find that the BI Publisher report is missing. This problem is encountered on browsers with a medium-level of privacy and popups blocked. To work around this problem, use a different browser than Internet Explorer version 7, or view the report in BI Publisher rather than in Oracle BI EE, or reduce the privacy setting of the browser.

### How Do Oracle BI Publisher Reports and Dashboard Pages Interact?

This section contains the following topics:

- "About Oracle BI Publisher and Dashboard Pages"
- "About Adding Reports to Dashboard Pages"

#### About Oracle BI Publisher and Dashboard Pages

This section contains the following topics:

- "Interacting with Reports on Dashboard Pages"
- "Selecting a BI Publisher Report for a Dashboard Page"

For general information on BI Publisher, see "Integration of Oracle BI EE with Oracle BI Publisher".

**Interacting with Reports on Dashboard Pages** You can run, view, and interact with a BI Publisher report on a dashboard page. When included on a dashboard page, the BI Publisher report can include a toolbar that can offer options for selecting a layout template, changing the BI Publisher report's output format, exporting the BI Publisher report, sending the BI Publisher report to an available destination (for example, printer, fax, e-mail, or FTP), scheduling the BI Publisher report, and analyzing the data.

Selecting a BI Publisher Report for a Dashboard Page Because reports can be scheduled, you can select the latest run of the report that you want to include on the dashboard page. The report run that you select also determines whether dashboard prompts can be used, as described in the following list:

When a report that is not scheduled or has no previous version is included on the dashboard page, the report will be executed and generated when you access the dashboard page. You can use the dashboard prompts to regenerate the report and display updated data.

When you add a report that is scheduled or that has a previous run to a dashboard page, you can specify whether you want the most recently generated version of the report to be displayed on the dashboard. (To do so, you use the View Latest Version box in the "BI Publisher Report Properties dialog".) If you specify that you want the most recently generated version of the report, because this report has been run by the scheduler, you cannot use the dashboard prompts to regenerate the report from the dashboard.

About Briefing Books and Printing BI Publisher Reports If you plan to print a dashboard page that contains a BI Publisher report or to include the page in a briefing book, then you must keep the following points in mind:

- If you print the briefing book as PDF and if the output format of the BI Publisher report is PDF, then the BI Publisher report is printed after the other objects on the page. If you print a dashboard page that contains a BI Publisher report as PDF, but the dashboard page is not part of a briefing book, then the BI Publisher will not be printed.
- If you print the dashboard page or briefing book as MHTML, then the BI Publisher report will not be printed.

#### About Adding Reports to Dashboard Pages

You can add one or more existing reports to a dashboard page. The advantage is that you can share reports with other users and schedule the dashboard pages using agents. An agent sends the entire dashboard to the user, including all data pages that the report references.

When configuring an agent for a dashboard page that contains a BI Publisher report, ensure that the following criteria are met:

- The output format of the BI Publisher report must be PDF.
- The agent must be set to deliver PDF.

You can add reports to a dashboard page as embedded content and as a link. Embedded means that the report is displayed directly on the dashboard page. The link opens the report in BI Publisher within Oracle BI EE.

If you modify the report in BI Publisher and save your changes, then refresh the dashboard page to see the modifications.

### Adding Reports to Dashboard Pages

To add a report to a dashboard page:

- 1. Edit the dashboard. For information, see "Editing Dashboards".
- Navigate to the page to which you want to add a report.
- Select a report in one of the following ways:
  - Select the report from the Catalog pane and drag and drop it into a section on the dashboard page.
  - To add a report from a dashboard page, select the report from the folder that contains its dashboard in the Catalog pane.
- **4.** Set the properties of the object. To do so, hover the mouse pointer over the object in the Page Layout area to display the object's toolbar, and click the **Properties** button.

The "BI Publisher Report Properties dialog" is displayed.

- Complete the fields in the properties dialog as appropriate.
- Click **OK**. 6.
- Click Save. 7.
- If required, add a prompt to the dashboard page to filter the results of an embedded parameterized report, as described in "Using Prompts with Parameterized Reports".
- Optionally, schedule the dashboard with an agent, as described in Chapter 8, "Delivering Content."

### Using Prompts with Parameterized Reports

You can use prompts to filter the results of embedded parameterized BI Publisher reports to show only results that match the prompt criteria.

A BI Publisher report that receives its data from an analysis must have the report columns that you want to filter on set to "Is Prompted" in the analysis. This type of report supports the full range of prompt expressions, but the analysis cannot contain parameters.

#### To use prompts with parameterized reports:

- 1. In BI Publisher, open the report and locate the parameters that it uses. Set a default value for each required parameter so that the report displays correctly without user interaction.
- **2.** Create a new column prompt for each parameter by following these steps:
  - In the global header, click **New**, then **Dashboard Prompt**.
  - Select either the subject area that includes the columns from the report or a subject area whose columns closely match those in the report.
  - In the "Definition pane", click the **New** button, select **Column Prompt**, then select a column to use for the prompt.

For more information on creating prompts, see Chapter 6, "Prompting in Dashboards and Analyses."

- 3. Complete the "New Prompt: Column dialog" and click OK. Verify the following settings:
  - Set the Operator field to **is equal to/is in**.
  - Define a presentation variable with the exact same name as the parameter from the report. When using variable names in prompts, ensure that you spell them correctly and adhere to case-sensitivity. Make the data type of the parameter match the data type of the column, if they are not based on the same database column.
- 4. Click the **Save Prompt** toolbar button to save the prompt to the catalog in a shared folder.
- 5. Navigate to the dashboard that contains the parameterized report and click the **Edit Dashboard** toolbar button.
  - The Dashboard builder is displayed.
- 6. In the Catalog pane, navigate to the folder that contains the prompt that you want to add.

- 7. Drag and drop the prompt into the section on the dashboard page that contains the report.
- **8.** Click the **Save** toolbar button.

### Changing the Properties of a Dashboard and its Pages

You can change the properties of a dashboard and its pages. Specifically, you can:

- Change the style and description of the dashboard
- Add hidden named prompts to the dashboard and to its pages
- Specify which links (Analyze, Edit, Refresh, Print, Export, Add to Briefing Book, and **Copy**) are to be included with analyses at the dashboard level. Note that you can set these links at the dashboard page level and the analysis level, which override the links that you set at the dashboard level. For more information, see "Report Links dialog".
- Rename, hide, reorder, set permissions for, and delete pages.
- Specify which accounts can save shared customizations and which accounts can assign default customizations for pages, and set account permissions.
- Specify whether the **Add to Briefing Book** option is to be included in the Page Options menu for pages.

#### To change the properties of a dashboard and its pages:

- Edit the dashboard. For information, see "Editing Dashboards".
- 2. Click the **Tools** toolbar button and select **Dashboard Properties**. The "Dashboard Properties dialog" is displayed.
- Make the property changes that you want and click **OK**.
- **4.** Click the **Save** toolbar button.

# Changing the Properties of Objects Added to Dashboard Pages

You can change the properties of objects that have been added to a dashboard page from the "Dashboard Objects pane" and from the "Catalog pane".

#### To change the properties of an object on a dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- Navigate to the page that contains the object.
- 3. Hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Properties** button.
  - What is displayed depends on the type of object. For some objects, a properties dialog is displayed. For other objects, a menu of options is displayed. For more information on the properties that you can change, see "Properties Buttons for Objects".
- **4.** Make the property changes that you want.
- Click the **Save** toolbar button.

# **Deleting Objects on Dashboard Pages**

If you add an object that you later decide that you do not want, then you can delete it. Keep the following points in mind when deleting objects:

- When you delete an object that contains other objects, such as a column or section, you also delete all objects in that container.
- When you delete a column, other columns on the page might resize automatically to maintain column alignment.
- For objects that are saved in the catalog, the object is deleted from the dashboard page only. It is not deleted from the catalog. (Users with the appropriate permissions can edit the contents of the catalog. For information, see Chapter 13, "Managing Objects in the Oracle BI Presentation Catalog.")

#### To delete an object on a dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- Navigate to the page that contains the object that you want to delete.
- Hover the mouse pointer over the object in the Page Layout area to display the object's toolbar and click the **Delete** button.

# **Deleting Dashboard Pages**

You can delete:

- The current dashboard page
- One or more dashboard pages from the "Dashboard Properties dialog"

### Deleting The Current Dashboard Page

To delete the current dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- Navigate to the page that you want to delete.
- Click the **Delete Current Page** toolbar button.
- Confirm the deletion.

### **Deleting One or More Dashboard Pages**

To delete one or more dashboard pages:

- Edit the dashboard. For information, see "Editing Dashboards".
- Click the **Tools** toolbar button and select **Dashboard Properties**.

The "Dashboard Properties dialog" is displayed.

- **3.** For each page that you want to delete:
  - **a.** In the **Dashboard Pages** area, select the page.
  - Click **Delete** in the Dashboard Pages toolbar.
  - **c.** Confirm the deletion.
- Click **OK**.

# Saving Dashboards By Other Names and In Other Locations

You can save a dashboard:

By another name

The new name for the dashboard must not already exist in the destination folder, otherwise, the save operation will fail.

Anywhere in the Oracle BI Presentation Catalog

If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/first level subfolder, then the dashboard will be listed in the Dashboard menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), then it will not be listed.

If you choose a folder in the Dashboards subfolder directly under /Shared Folders/first level subfolder in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose a folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to /Shared Folders/Sales/Dashboards. (A new "Dashboards" folder is not automatically created if you choose a folder at any other level.)

### To save a dashboard by another name or in another location:

- 1. Edit the dashboard. For information, see "Editing Dashboards".
- Click the **Save Dashboard As** toolbar button to display a dialog, where you specify the save criteria.

# Opening and Using Dashboards

To open and use a dashboard:

- 1. In the global header, click **Catalog** to display the "Catalog page".
- 2. Navigate to the dashboard that you want to open and click the **Open** link.

The dashboard is opened to the first "Dashboard page". If no content has been added, then an empty dashboard page notification message is displayed.

- **3.** (optional) Perform any of the following tasks:
  - Display the dashboard in the "Dashboard builder" for editing.
  - Navigate among dashboard pages by clicking the page tabs.
  - Print a page.

For information, see "About Briefing Books and Printing BI Publisher Reports".

Refresh a page.

Perform this task to ensure that the refresh operation bypasses saved information in the Oracle BI Presentation Services cache and is issued to the Oracle BI Server for processing.

When you select a specific dashboard or analysis, Oracle BI Presentation Services checks its cache to determine if the identical results have recently been requested. If so, Oracle BI Presentation Services returns the most recent results, thereby avoiding unnecessary processing by the Oracle BI Server and the back-end database. If not, the analysis is issued to the Oracle BI Server for processing. You cannot force the analysis past the Oracle BI Server's cache.

Administrators can configure cache settings for Oracle BI Presentation Services that control what is cached and for how long. For information about the Oracle BI Server cache, see *Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.* 

Add a page to a briefing book.

For information, see "Adding Content to New or Existing Briefing Books".

Create a bookmark link or a prompted link to the page.

For information, see "About Creating Links to Dashboard Pages" and "Creating Links to Dashboard Pages".

Apply saved customizations.

For information, see "What Are Saved Customizations for Dashboard Pages?" and "Applying Saved Customizations".

Edit saved customizations.

For information, see "What Are Saved Customizations for Dashboard Pages?" and "Editing Saved Customizations".

Save the current customizations.

For information, see "What Are Saved Customizations for Dashboard Pages?" and "Saving Customizations".

Clear the current customizations.

For information, see "What Are Saved Customizations for Dashboard Pages?" and "Clearing Your Current Customization".

For information on keyboard shortcuts that you can use in a dashboard, see "Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher".

# What Are Saved Customizations for Dashboard Pages?

Saved customizations allow users to save and view later dashboard pages in their current state with their most frequently used or favorite choices for items such as filters, prompts, column sorts, drills in analyses, and section expansion and collapse. By saving customizations, users need not make these choices manually each time that they access the dashboard page.

Users with the appropriate permissions and dashboard access rights can perform the following activities:

- Save various combinations of choices as saved customizations, for their personal use or use by others.
- Specify a saved customization as the default customization for a dashboard page, for their personal use or use by others.
- Switch between their saved customizations.

For information on using saved customizations, see "Applying Saved Customizations" and "Clearing Your Current Customization".

For information on saving customizations and editing saved customizations, see "Saving Customizations" and "Editing Saved Customizations"

### **Example Scenarios for Creating and Using Saved Customizations**

This section describes two example scenarios that describe the creation and use of saved customizations.

#### Scenario 1: Saved Customizations Created by a Group for Use by Others

An IT group in a consumer goods company builds a master dashboard that contains the content that various product groups need to view. The dashboard contains filters and prompts from which members of the product groups would ordinarily make customizations to view relevant results.

The master dashboard contains two analyses, one that shows sales for the east, west, north, and south regions, and another that shows all products shipped in those regions. The analysis for sales by region contains a prompt that allows users to select their particular region. The analysis for all products shipped contains a filter that allows users to select their products.

An IT consultant customizes the view for the Fizzy Brands product group for each region. The consultant first selects the east region and the Fizzy Brand products from the filters and prompts on the dashboard, and then saves these choices as a customization that can be shared by other users. The consultant then assigns this customization as the default view customization to members of the east region group that sells Fizzy Brand products. The consultant repeats this process for the west, north, and south regions.

When a Fizzy Brands sales representative for the western region signs in to Oracle Business Intelligence and views the dashboard, the representative initially views sales and shipment information based on the region and product choices assigned as the default view customization for that group. All sales representatives in that group who would typically make identical choices for region and product no longer have to do so.

### Scenario 2: Saved Customizations Created for Use by an Individual User

A business user's dashboard contains two reports, one that shows sales for all regions, and another that shows all products shipped. Each report contains a prompt, allowing the user to select a particular region and product. The user selects the eastern region and the Fizzy Brands product. The dashboard refreshes to show the user this view of the data. The user saves this view as a customization, indicates that the customization is for personal use, and that it is the default customization the user wants to see when viewing the dashboard. Then, this user creates additional combinations of the product and region sets in which the user is most interested, and saves them for later retrieval. The user can also access customizations that were saved by the IT group as shared customizations. To view sales in the western region for Fizzy Brands, the user clicks the **Page Options** button, selects **Apply Saved Customizations**, and selects the view named Dollar Sales, Western Region, Fizzy Brands. The dashboard refreshes with the new view of the data.

# **Saving Customizations**

You can save customization for use by you or by others. You can also specify whether the customization is to be the default customization for a dashboard page, for you or for others. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

#### To save a customization:

1. Open the dashboard in which you want to save a customization. For information, see "Opening and Using Dashboards".

- **2.** Navigate to the page on which you want to save a customization.
- 3. Make your customizations.
- **4.** Click the **Page Options** toolbar button on the dashboard page and select **Save Current Customization.**

The "Save Current Customization dialog" is displayed.

- Enter a descriptive name for the customization.
- Specify for whom the customization is to be saved:
  - To save the customization for your personal use, select **Me**.
  - To save the customization for use by others, select **Others** and then click **Set** Permissions to display the "Saved Customization Permissions and Defaults dialog", where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.
- 7. Optionally, to assign this customization as your default customization, select Make this my default for this page.
- Click **OK**.

# **Applying Saved Customizations**

You can apply customizations that you have saved for your own personal use or that have been saved by someone else for your use. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

#### To apply a saved customization:

- Open the dashboard in which you want to apply a saved customization. For information, see "Opening and Using Dashboards".
- **2.** Navigate to the page that contains the customization that you want to apply.
- Click the **Page Options** toolbar button and select **Apply Saved Customization**.
  - Your personal saved customizations, if any, are shown at the beginning of the list. Shared saved customizations are listed next. Your current default customization is shown in bold type.
- **4.** Click a saved customization in the list to apply it to the dashboard page.

# **Editing Saved Customizations**

You can rename customizations, change which customization to use as your default, change permissions for those customizations that have been shared with others, and delete customizations. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

#### To edit saved customizations:

- 1. Open the dashboard in which you want to edit a customization. For information, see "Opening and Using Dashboards".
- Navigate to the page that contains the customization that you want to edit.
- Click the Page Options toolbar button on the dashboard page and select Edit Saved Customizations.

The "Edit Saved Customizations dialog" is displayed.

- 4. Rename customizations, change which customization to use as your default, change permissions for those customizations that have been shared with others, and delete customizations, as appropriate.
- 5. Click OK.

# **Clearing Your Current Customization**

You can clear your current customization if you decide the choices for items such as filters, prompts, column sorts, drills in analyses, and section expansion and collapse are not what you want. For more information on customizations, see "What Are Saved Customizations for Dashboard Pages?"

#### To clear your current customization:

1. Click the **Page Options** toolbar button on the dashboard page and select **Clear My** Customization.

The current customization is cleared.

### **About Dashboard Template Pages for New Users**

Dashboard template pages are dashboard pages that are used to populate the personal dashboards (My Dashboard) of new users on their initial login. This allows users to see one or more dashboard pages with content rather than an empty dashboard when they first log in. It also gives users a starting point to build their own dashboard pages.

### **How Dashboard Template Pages Work**

You create dashboard template pages for your users in dashboards that have a designated name (by default the designated name is "default") and that you save in subfolders of /Shared Folders. When a new user logs in for the first time, Oracle BI EE searches for dashboard template pages in all dashboards that have the designated name, copies all dashboard template pages to which the user has permission to the user's My Dashboard folder, and displays them in the user's My Dashboard.

If a user has permissions to dashboard template pages in more than one dashboard, then Oracle BI EE copies all template pages from those dashboards to the user's My Dashboard folder and displays them alphabetically by name in the user's My Dashboard. If two pages have the same name, then the name of one of the pages will be prefixed with the name of the folder in which the dashboard was saved.

# Where Oracle BI EE Searches for Dashboard Template Pages

By default, Oracle BI EE searches for dashboard template pages in all dashboards that are named "default" and that have been saved in subfolders of /Shared Folders. (It searches only subfolders under /Shared Folders (for example, /Shared Folders/Finance) and not the entire hierarchy (for example, not /Shared Folders/Finance/Div1.)

If your organization has designated a name other than "default" for the name of dashboards that contain dashboard template pages, then Oracle BI EE searches for dashboard template pages in dashboards with that name (for example, "Templates") rather than "default" in subfolders of /Shared Folders.

To designate a name other than "default" for the name of dashboards that contain dashboard template pages, your administrator must set the DefaultName element in the instanceconfig.xml file. For information, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

### How Users Can Work with Dashboard Template Pages

Users can use dashboard template pages:

- As a starting point to build their own dashboard pages.
  - Users can change any of the content on these dashboard template pages. Any changes that they make to the content are made to their local copies of the dashboard template pages in their My Dashboard folders, and not to the original dashboard template pages.
- As examples of additional pages that they might want to build.

If users delete a dashboard template page from their My Dashboard, then they cannot repopulate My Dashboard with the page. However, if users delete their entire My Dashboard, when they log in again or navigate to My Dashboard again, their My Dashboard is recreated with all the latest dashboard template pages.

# **Creating Dashboard Template Pages for New Users**

You can create dashboard template pages for users so that they see one or more dashboard pages with content rather than an empty dashboard when they first log in. For more information on dashboard template pages, see "About Dashboard Template Pages for New Users".

#### To create dashboard template pages:

- Create one or more dashboards to contain the dashboard template pages. For each dashboard, specify the following:
  - In the Name field, enter "default" unless your organization has designated another name for the name of dashboards that contain dashboard template pages, in which case, enter the name your organization has designated.
  - In the **Location** box, select a Dashboard folder in a subfolder of /Shared Folders, for example /Shared Folders/Finance/Dashboards.

For information, see "Creating Dashboards".

Create one or more dashboard pages and add content to the pages. See "Adding New Pages to Dashboards" and "Adding Content to Dashboards".

> **Note:** Users will have access only to content to which they have appropriate permissions.

Assign permissions on the dashboard to allow read access for all users whose My Dashboard you want to populate with the dashboard pages. For information, see "Assigning Permissions".

**Note:** If you later change the dashboard content or the permissions to the dashboard, then the changes take effect only for new users on first login, not for users whose My Dashboard has already been populated with the dashboard template pages.

# Publishing Dashboard Pages

You can publish a dashboard page to a shared dashboard location so that you can share the page with others.

When you publish a dashboard page:

- Personal content (such as analyses, prompts, and so on) is copied to a destination location that you specify and references updated as appropriate.
- References to shared content are retained.
- If you have made changes to the page but have not saved them, then the unsaved changes are published along with the saved changes.
- Ensure that other users who will display the published dashboard page have the appropriate privileges for the objects on the page. For example, if the page contains a BI Publisher report, then users must have the appropriate privilege to see that report.

#### To publish a dashboard page:

- 1. Edit the dashboard that contains the page that you want to publish. For information, see "Editing Dashboards".
- **2.** Navigate to the page that you want to publish.
- Click **Tools** and then select **Publish Page to Dashboard**.

The "Publish Page to Dashboard dialog" is displayed.

- **4.** In the Dashboard field, specify the name of the destination dashboard.
- If the Publish Dashboard Page warning is displayed to indicate that content (such as the page, analyses, prompts, and so on) already exists in the destination location, then click:
  - **OK** to continue with the publishing operation and replace the existing content.
  - Cancel to discontinue the publishing operation and not replace the existing content.
- 6. Click OK.

The dashboard page is copied to the destination location.

### About Creating Links to Dashboard Pages

You can create links to dashboard pages, if allowed at your organization. This lets you, for example, save a link as a bookmark or copy and send a link to other users in e-mail.

There are two types of links that you can create — bookmark links and prompted links. The following sections describes these links:

- "What Are Bookmark Links?"
- "What Are Prompted Links?"

### What Are Bookmark Links?

A bookmark link captures the path to a dashboard page and all aspects of the page state, for example:

http://localhost/10.1.3.2/saw.dll?Dashboard&

scid=7ndOC-SjmWo&PortalPath=%2Fusers%2Fadministrator%2F portal&Page=p2&PageIdentifier=7fsg0r2sdssvgen4&BookmarkState=r78an1mbj0fj4lmghdjfn dvvai

After you create a bookmark link, you can:

- Save the link as a bookmark so that you can return to the exact same page content at a later time.
- Copy and send the link to other users who then can view the exact same content that you are viewing, providing they have the same permissions as you and have access to the page.

When you create a bookmark link, the state of a dashboard page is saved in the catalog as a hidden bookmark object for a period of time specified by your organization. The default is 30 days. See the administrator for the period of time that is specified for your organization. Because the state of a dashboard page is saved when you create a bookmark link, you can continue to modify the content of the page after you create the

### What Are Prompted Links?

A prompted link captures the path to a dashboard page and a simplified presentation of the dashboard prompts, for example:

```
...Action=Navigate&col1=Products.Color&val1="Armory"+"Clear"&col2=Periods."Month"&
op2=gt&val2="05/01/1998%2012:00:00%20AM"
```

When you create a prompted link, you can manually or programmatically manipulate the link, such as by adding different values for the prompts.

### What Is the Syntax for a Prompted Link?

The prompted link syntax is as follows:

```
<Content Path>, Action=Navigate, Column1 (col1), Operator1 (op1), Values1 (val1),
Column2 (col2), Operator2 (op2), Values2 (val2)...
```

When manipulating this syntax:

- Use plus signs to separate values.
- Use the same operators as those for the Go URL. For a list of these operators, see Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition
- Optionally omit the operator parameter for equal (eq).
- Optionally omit the double quotes if there are no white spaces inside the values.

# **Creating Links to Dashboard Pages**

To create a link to a dashboard page:

- Open the dashboard in which you want to create a link to a dashboard page. For information, see "Opening and Using Dashboards".
- Navigate to the page for which you want to create a link.
- Click the **Page Options** toolbar button on the dashboard page and:
  - To create a bookmark link, select **Create Bookmark Link**.

To create a prompted link, select **Create Prompted Link**.

**Note:** The administrator can control the display of the **Create Bookmark Link** and **Create Prompted Link** options. For information about controlling the display of these settings, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

If you drill in an analysis that has been set to replace the dashboard with the new results (rather than show the new results directly in the dashboard), then the **Create Bookmark Link** option is displayed as a link below the new results rather than as an option on the Page Options menu. (To specify how drilling works in an analysis, you use the **Drill in Place** option on the Properties menu for a section. For more information, see "Properties Buttons for Objects".

The link is displayed in the Address Bar of the browser. If the link is a:

- Bookmark link, then you can save the it as a bookmark or copy and send it to other users.
- Prompted link, then you can manually or programmatically manipulate the

### Working with Briefing Books

If your organization licensed Oracle BI Briefing Books, then you can work with briefing books.

The following topics explain what briefing books are and how you work with them:

- "What Are Briefing Books?"
- "Adding Content to New or Existing Briefing Books"
- "Editing Briefing Books"
- "Downloading Briefing Books"
- "Adding a List of Briefing Books to a Dashboard Page"
- "Using Agents to Deliver Briefing Books"

### What Are Briefing Books?

A briefing book is a collection of static or updatable snapshots of dashboard pages, individual analyses, and BI Publisher reports.

You can:

- Add the content of dashboard pages (including pages that contain BI Publisher reports) or individual analyses to new or existing briefing books. See "Adding Content to New or Existing Briefing Books".
- Edit briefing books to reorder content, delete content, and change the content type, navigation link properties, and content description. See "Editing Briefing Books".
- Download briefing books in PDF or MHTML format for printing and viewing. See "Downloading Briefing Books".

The PDF version of a briefing book contains an automatically generated table of contents. For information about the table of contents, see "About the Table of Contents in a PDF Version of a Briefing Book".

- Add a list of briefing books to a dashboard page. See "Adding a List of Briefing Books to a Dashboard Page".
- Update, schedule, and deliver briefing books using agents, if your organization licensed Oracle Business Intelligence Delivers. See "Using Agents to Deliver Briefing Books".

#### About the Table of Contents in a PDF Version of a Briefing Book

The PDF version of a briefing book contains a table of contents that is automatically generated. It contains an entry for each dashboard page, analysis, and report in the briefing book. Each of these entries includes a time stamp and the page number within the PDF file. The time stamp value depends on how the content was saved to the briefing book. If the content was saved as updatable, then the time stamp is current. If the content was saved as a snapshot, then the time stamp is the time of the snapshot.

Indented beneath each entry for a dashboard page are any briefing book links included on that page, up to a maximum of nine links. These entries do not include timestamps. For example:

```
Table of Contents
My Dashboard Page 7/11/2008 9:15:20 AM . . . .
    Years to Dollars Dashboard . . . . .
```

The administrator can modify the template for the table of contents so that the table of contents that is generated in your briefing books might have a different look.

**Note:** The table of contents is always generated in English. Other languages are not supported. Therefore, you might want to translate the tables of contents that are generated in briefing books.

For more information about including BI Publisher reports with briefing books, see "About Briefing Books and Printing BI Publisher Reports".

### Adding Content to New or Existing Briefing Books

You can add the content of dashboard pages (including pages that contain BI Publisher reports) or individual analyses to briefing books. You can add the content to existing briefing books or to new briefing books that you create.

#### To add content to a new or existing briefing book:

- Open the dashboard that contains the content that you want to add to a briefing book. For information, see "Opening and Using Dashboards".
- Navigate to the page that you want to add or that contains the analysis that you want to add.
- Perform one of the following actions:
  - To add the contents of the dashboard page to a briefing book, click the **Page** Options toolbar button on the dashboard page and select Add To Briefing Book.

**Note:** The **Add to Briefing Book** option is not available on an empty dashboard page or if the Show Add to Briefing Book box in the "Dashboard Properties dialog" has not been selected for the page.

To add the results of an individual analysis to a briefing book, locate the analysis on the dashboard and click the **Add to Briefing Book** link.

**Note:** This link is displayed only if the **Add to Briefing Book** option was selected in the Report Links dialog when the analysis was added to the dashboard. For information about setting the Add to Briefing **Book** option, see "Report Links dialog".

The "Save Briefing Book Content dialog" is displayed.

- **4.** Click **Browse** to display the "Save As dialog".
- **5.** In the Save As dialog, to save the contents to:
  - A new briefing book, specify the location in which to save the briefing book in the **Save In** field, enter a name for the briefing book in the **Name** field, optionally enter a description in the **Description** field, and click **OK**.
  - An existing briefing book, select the briefing book and click **OK**.
- In the Save Briefing Book Content dialog, complete the remaining fields as appropriate.
- 7. Click OK.

The content is added to the briefing book.

### **Editing Briefing Books**

You can edit briefing books to reorder content, delete content, and change the content type, navigation link properties, and content description.

#### To edit a briefing book:

- To edit a briefing book:
  - In the catalog, in the global header, click **Catalog** to display the "Catalog
  - On a dashboard page, open the dashboard page that contains the briefing
- **2.** Navigate to the briefing book that you want to edit and click **Edit**.

The "Edit Briefing Book dialog" is displayed.

- **3.** To change content:
  - **a.** Select the content.
  - **b.** Click **Edit** to display the "Page Properties dialog".
  - **c.** Change the content type, the number of navigation links to follow for updatable content, or the content description as needed.
  - d. Click OK.

- To reorder content, select the content and then drag and drop it to the desired
- To delete content, select the content and click **Delete**.
- Click **OK**.

### Downloading Briefing Books

You can:

- Download briefing books to your computer in MHTML format and then share them for offline viewing.
- Download briefing books in PDF format and print them.

The PDF version of a briefing book contains an automatically generated table of contents. For information about the table of contents, see "About the Table of Contents in a PDF Version of a Briefing Book".

To download a briefing book:

- 1. In the global header, click **Catalog** to display the "Catalog page".
- Navigate to the briefing book that you want to download.
- Perform one of the following actions:
  - To download the briefing book in PDF format, click PDF and then open or save the file.

**Note:** The Adobe Reader application is required to view or print a briefing book PDF file.

**Note:** BI Publisher reports that are contained in the briefing book are only included in the PDF file if the reports themselves are enabled for PDF output.

To download the briefing book in MHTML format, click Web Archive (.mht) and then open or save the file.

Downloaded briefing books are saved with an .mht file extension and can be opened in a browser. You can then e-mail or share the briefing book.

### Adding a List of Briefing Books to a Dashboard Page

You can add a list of briefing books to a dashboard page.

#### To add a list of briefing books to a dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- Navigate to the page to which you want to add a list of briefing books. 2.
- From the "Dashboard Objects pane", drag and drop a folder object into a section.
- Hover the mouse pointer over the folder object in the Page Layout area to display the object's toolbar and click the **Properties** button.

The "Folder Properties dialog" is displayed.

- 5. In the Folder field, enter the folder that contains the briefing books that you want
- **6.** In the **Expand** box, specify whether to show an expanded view of the folder.
- 7. In the Show RSS Link box, specify whether to add an RSS feed option to the folder.
- **8.** Click **OK** and then click **Save** to save the dashboard.

The folder is added to the dashboard. On the Dashboard page, to:

- See a list of the briefing books if the folder is not expanded, click the folder.
- Edit a briefing book, click its **Edit** link. See "Editing Briefing Books".
- Download a briefing book in PDF format, click its PDF link. See "Downloading Briefing Books".
- Download a briefing book in MHTML format, click its Web Archive (.mht) link. See "Downloading Briefing Books".

### **Using Agents to Deliver Briefing Books**

To use an agent to deliver a briefing book:

- Create or edit the agent to be used to deliver the briefing book. For information, see "Creating Agents".
- In the "Agent editor: Delivery Content tab", click **Browse** to select the briefing

When the agent runs, the briefing book is delivered.

# Filtering and Selecting Data for Analyses

This chapter explains how to construct filters, selection steps, groups, and calculated items and how to use them to specify the data that is displayed in analyses and dashboards. This chapter contains the following topics:

- "Saving Objects as Inline or Named"
- "What are Filters and Selection Steps?"
- "Working with Selections of Data"
- "Creating or Editing Column Filters"
- "Working with the EVALUATE\_PREDICATE Function"
- "Applying a Named Filter to an Analysis"
- "Combining and Grouping Column Filters"
- "Using a Saved Analysis as a Filter"
- "Creating and Editing the SQL Statements for a Column Filter in an Analysis"
- "Working with Groups and Calculated Items"

## Saving Objects as Inline or Named

This section describes saving objects as inline or named. It contains the following topics:

- "What are Inline or Named Objects?"
- "What is the Folder Structure for Named Objects?"
- "Saving Filters as Inline or Named"
- "Saving Groups and Calculated Items as Inline or Named"

### What are Inline or Named Objects?

As you work with certain objects, you can create other objects that are saved with those objects. When you save one object with another, that object is saved "inline." You can save filters, groups, and calculated items inline. For example, you can create a group as part of an analysis. When you save the analysis, the group is saved "inline" or along with the analysis.

In addition to saving these objects inline, you can save them as individual objects with the subject area in the Oracle BI Presentation Catalog. When you save an object on its own, its becomes a "named" object. Named objects provide reusability, because you can create one object and use it multiple times with any analysis, dashboard (for

filters), or dashboard page (for filters) that contains the columns that are specified in the named object. When the named object is updated and saved, those updates are immediately applied to all objects where the named object is used.

For example, after you save a group inline with an analysis, you can save the group as its own object in the catalog. You can then apply that named group from the Catalog pane to other analyses.

### What is the Folder Structure for Named Objects?

Named filters, groups, and calculated items are generally saved to their related subject area folder. By saving the objects to a subject area folder, you ensure that they are available when you create an analysis for the same subject area.

Named objects saved in the /My Folders folder are available only to you. Objects saved in the /Shared Folders folder are available to other users who have permission to access the folders. If a subject area folder does not exist in your /My Folders folder or within the /Shared Folders folder, then the subject area folder is created automatically. When you save the object, the "Save As dialog" will display a default save path to /My Folders/Subject Area Contents/<subject area>. However, the dialog's Folders area continues to display all instances of the subject area folder in the catalog.

### Saving Filters as Inline or Named

When you create an inline filter in the Analysis editor: Criteria Tab's "Filters pane", you can optionally save the inline filter as a named filter. Named filters can also be created at the analysis level or as a stand-alone object from the global header.

A named filter can filter all or some of the analyses that are embedded in a dashboard or analyses that are embedded on the same dashboard page.

### Saving Groups and Calculated Items as Inline or Named

You can save groups and calculated item as an inline or named object:

- When you create a group or calculated item while editing and saving a view or while working in the "Compound Layout", the group or calculated item is saved inline with the analysis.
- When you work in the Selection Steps pane:
  - You can save a group or calculated item that is within a step as a named object in the catalog.
  - You can save a set of steps or the resulting members list for a column as a named object. You cannot save a set of steps as a group is one of the steps includes a calculated item.

See "Adding a Group to Another Analysis" for information on adding a saved group to an analysis.

To save a calculated item or group as a named object to the catalog:

- Display the "Selection Steps pane".
- 2. Click the link for the calculated item or group, then click **Save Calculated Item As** or **Save Group As** to display the "Save As dialog".
- **3.** Complete the dialog to save the object to the catalog.

To save a set of steps as a group to the catalog:

- **1.** Display the "Selection Steps pane".
- Click the **Save Selection Steps** button to the far right of the column name.
- Complete the "Save Selection Steps dialog" to save the group as an object to the catalog.

### What are Filters and Selection Steps?

You use both filters and selection steps to limit the results that are displayed when an analysis is run, so that the results answer a particular question. Together with the columns that you select for an analysis, filters and selection steps determine what the results will contain. Based on the filters and selection steps, only those results that match the criteria are shown. For example, depending on the industry in which you work, you can use filters and selection steps to learn who are the top ten performers, what are the dollar sales for a particular brand, which are the most profitable customers, and so on.

**Note:** Another kind of filter, called a prompt, can apply to all items in a dashboard. Prompts can be used to complete selection steps and filters at runtime. For information, see Chapter 6, "Prompting in Dashboards and Analyses."

### How Do Filters and Selection Steps Differ?

Filters and selection steps are applied on a column-level basis and provide two methods for limiting the data in an analysis. A filter is always applied to a column before any selection steps are applied. Steps are applied in their specified order. Filters and selection steps differ in various ways.

#### **Filters**

Filters can be applied directly to attribute columns and measure columns. Filters are applied before the query is aggregated and affect the query and thus the resulting values for measures. For example, suppose that you have a list of members in which the aggregate sums to 100. Over time, more members meet the filter criteria and are filtered in, which increases the aggregate sum to 200.

#### **Selection Steps**

Selection steps are applied after the query is aggregated and affect only the members displayed, not the resulting aggregate values. For example, suppose that you have a list of hierarchical members in which the aggregate sums to 100. If you remove one of the members using a selection step, then the aggregate sum remains at 100.

You can create selection steps for both attribute columns and hierarchical columns. Selection steps are per column and cannot cross columns. Because attribute columns do not have an aggregate member, the use of selection steps versus filters for attribute columns is not as distinctive as for hierarchical columns. While measure columns are displayed in the Selection Steps pane, you cannot create steps for them so steps do not affect them. Measures are used to create condition steps for attribute and hierarchical columns, such as Sales greater than \$1 million.

## Applying Filters to Attribute Columns to Affect Hierarchical Columns

You can use a filter on a related attribute column to affect the display of members in a hierarchical column. For example, suppose a hierarchical column contains the levels

Year, Quarter, and Month. Suppose that a filter exists on the attribute column that corresponds to the Year hierarchy level. If you create a filter on Year to limit it to 2008 and 2009, then when the hierarchical column is displayed in a view, only those two years are visible. This functionality depends on the way that the logical columns have been defined in the business layer of the subject area in the Oracle BI Administration

## **Working with Selections of Data**

As you specify which data members to include in an analysis, you create selections of data from the data source. Each selection specifies the criteria for a set of members for a particular column, such as Product or Geography. Each selection consists of one or more steps. A step is an instruction that affects the selection, such as add Product members whose values contain the text "ABC." The order in which steps are performed affects the selection of data. Each step acts incrementally on the results from previous steps, rather than acting on all the members for that column.

You can view these selection steps in the "Selection Steps pane". Steps are created via the following means:

- When you add a column to an analysis, a selection step is created automatically to start with all members, unless you explicitly add specific members. As you drag and drop column members in the Results tab to add to the analysis, steps are also created automatically. For example, suppose that you drag and drop the FY2007 and FY2008 members from the Year hierarchical column to a pivot table. The selection step "Add FY2007, FY2008" is created.
- As you add groups and calculated items, steps are created automatically.
- You can create steps directly using the Selection Steps pane, to refine the selection of data for a particular hierarchical column or attribute column. You can display the Selection Steps pane from various places including the Results tab, the Criteria tab, and some view editors.

Selection steps can be one of the following types:

- Explicit list of members A step can include a list of members for a column, such as Boston, New York, Kansas, South. For hierarchical columns, the members can be from different hierarchy levels. For attribute columns, the members can be from only that column.
- Condition step A step can specify that members are selected from a column based on a condition, which can be one of various types including based on measures or on top/bottom values. This member list is dynamic and determined at runtime.
- Based on hierarchy step A step for hierarchical columns that allows you to select the type of relationship with which to select members. You can select a family relationship (such as children of or parent of), a specific hierarchy level (for level-based hierarchies only), or a level relationship (for level-based hierarchies only).
- Groups and calculated items A step can include a group or calculated item. Groups and calculated items can be used only with Add steps; they cannot be used in Keep Only or Remove steps.

For information, see "Working with Groups and Calculated Items".

### Creating Selection Steps

You create steps in the "Selection Steps pane", which you can display in various places. The following procedure describes how to create steps in the Results tab.

#### To create selection steps:

- Display the "Analysis editor: Results tab".
- If the Selection Steps pane is not visible, then click the **Show Selection Steps pane** button in the toolbar to display it.
  - The pane might also be collapsed at the bottom of the Results tab. Click the plus sign icon to expand it.
- **3.** For the column whose steps you want to define, click the **Then**, **New Step** link.
- From the menu, select the option for the step type that you want to create and complete the resulting dialog.

### **Editing Selection Steps**

You can edit existing selection steps, as described in the following procedure.

#### To edit selection steps:

Hover the mouse pointer over the step in the Selection Steps pane and click a button on the resulting toolbar.

You can perform various tasks such as displaying a dialog for editing the step, deleting the step, or changing the order of the step in the list of steps.

For a group or calculated item, click its name to display a menu with options for editing and saving.

### Saving Selection Steps as a Group Object

If you have created a set of selection steps, then you can save and reuse the set as a group object, as described in "Saving Groups and Calculated Items as Inline or Named".

### Working with Selection Steps and Double Columns

If your repository is configured for double columns, then you can create a selection step on a double column. To do so, select the display values for that column and the step is automatically evaluated using the code values that correspond to those display values.

If you use double columns, then use care with the "New Calculated Item dialog". You can include a positional operator in the custom formula for the calculated item, such as \$1, which specifies the column from the first row in the data set. When you include a positional operator, the display values cannot be mapped to the code values when evaluating the formula.

For information on double columns, see "Understanding the Double Column Feature".

## Creating or Editing Column Filters

Use the following procedure to create or edit a named or inline filter.

To create or edit a column filter:

**Note:** If your repository is configured for double columns, and you want to use an operator other than is equal to / is in, is not equal to / is not in, or is between and specify code values rather than display values, then you should explicitly choose the code column rather than the display column.

For information on double columns, see "Understanding the Double Column Feature".

- **1.** To create a named filter, use the following sub-procedure:
  - a. From the Oracle Business Intelligence Home page, locate the global header, hover over the New menu, and from the menu select Filter. The Select Subject Area dialog is displayed.
  - **b.** From the Select Subject Area dialog, choose the subject area for which you want to create a filter. The "Filter editor" is displayed.
  - **c.** From the "Subject Areas pane", double-click the column for which you want to create the filter. The "New Filter dialog" is displayed.
- **2.** To create an inline filter, use the following sub-procedure:
  - Either create a new analysis or access an existing analysis for which you want to create a filter. Click the Criteria tab.
  - **b.** Locate the "Filters pane" and from the Filters Pane's toolbar, click the Create a **filter for the current subject area** button. The analysis' selected columns are displayed in the cascading menu.
  - Select a column name from the menu. Or select the **More Columns** option to access the "Select Column dialog" from which you can select any column from the subject area.

After you selected a column, the "New Filter dialog" is displayed.

**Note:** If you want to add a filter for a column located in a different subject area, then you must first add that subject area to the analysis by clicking the Add/Remove Subject Area button in the "Subject Areas pane".

- **3.** In the **Operator** field, choose an operator for the filter. The operator list from which you can choose is populated based on the type of column that you selected. For more information about each operator, including the is prompted and is based on the results of another analysis operator options, see "Operators".
- **4.** In the **Value** field, specify one or more values to use when applying the filter or condition. You can:
  - Type values, using a semi-colon to separate the values.
  - Select values from the list or calendar.

To search for specific values, click **Search** in the list box. The "Select Values dialog" is displayed, where you can search for and select values.

If your repository is configured for double columns, and you are creating the filter on a display column, then by default, you specify display values. However, if your organization allows the display of code values, then you can specify code values rather than display values, but only if you use one of the following operators:

- is equal to / is in
- is not equal to / is not in
- is between

To specify code values, select the **Select by** *Code Column* check box and then specify the values.

- 5. If your repository is configured for double columns, and you are creating the filter on a display column and want to filter on display values rather than code values, then deselect the **Filter by** *Code Column* check box.
- **6.** Click the **Add More Options** button to add a SQL expression, Session variable, Repository variable, or Presentation variable to the filter. Note that if you are setting the filter's value with a SQL expression or variable, you should leave the **Value** field blank. For more information on variables, see "Using Variables".
- 7. Select the **Protect Filter** check box to protect the filter's value from being overridden by a matching prompt's value or when the user navigates to another report within the analysis. When you navigate from one report to another report within an analysis, any prompt values that you specified in the first report can be transferred to the second report.
- To convert the filter to SQL statements, select the Convert this filter to SQL check box. The "Advanced SQL Filter dialog" is displayed.

**Note:** *This is a one-way conversion.* After you select the **Convert this** filter to SQL box, you can no longer view and edit the filter in the Edit Filter dialog. After you convert the filter to SQL statements, you can only view and edit the filter item as SQL statements in the Advanced SQL Filter dialog.

For more information about this option, see "Creating and Editing the SQL Statements for a Column Filter in an Analysis".

- When you are finished specifying the filter's criteria, click **OK**.
- **10.** Save the filter in one of the following ways:
  - From the Analysis Editor, you can select **Save Analysis** to save the filter as an inline filter.
  - From the Filter Editor, you can select **Save Filter** to save the filter as a named filter.

For more information, see "Saving Objects as Inline or Named".

### Working with the EVALUATE PREDICATE Function

This section provides the following topics on working with the EVALUATE\_ PREDICATE function:

- "How Can I Use the EVALUATE\_PREDICATE Function with a Filter?"
- "Adding the EVALUATE PREDICATE Function to an Inline Filter"

For more information about this function, see "EVALUATE PREDICATE".

### How Can I Use the EVALUATE\_PREDICATE Function with a Filter?

You can add an EVALUATE\_PREDICATE function as an inline filter clause. You cannot use this function with hierarchical columns. Use this function when you cannot create the filter clause that you want with the Oracle BI EE filter operators. This function is intended for database functions with a return type of Boolean, and can be used only for SQL functions. Support for EVALUATE\_PREDICATE does not extend across all multidimensional data sources at this time. Also, you cannot use EVALUATE\_ PREDICATE with XML data sources.

#### **Example**

The following is an example of how you can use the EVALUATE PREDICATE function. This example requests that Markets.Region values be greater than 14 characters. After it is run, this example returns any rows where the length of the data in the Region field is greater than 14 characters (for example, "SOUTHERN REGION").

```
SELECT
0,
"Paint". "Markets". "Region",
"Paint". "Markets". "District",
"Paint". "Sales Measures". "Dollars"
FROM "Paint"
Where EVALUATE PREDICATE('length(%1)>14', "Markets". "Region").
ORDER BY 1,2,3)
```

### Adding the EVALUATE\_PREDICATE Function to an Inline Filter

Use the following procedure to add the EVALUATE\_PREDICATE function to an inline filter. Note that you cannot use this function with hierarchical columns. For more information see "How Can I Use the EVALUATE\_PREDICATE Function with a Filter?" and "EVALUATE\_PREDICATE".

#### To add the EVALUATE\_PREDICATE function to an inline filter:

1. Go to the Analysis Editor's "Filters pane" and click the More Options toolbar button, and select the **Add EVALUATE\_PREDICATE function** option.

The "New EVALUATE\_PREDICATE Function dialog" is displayed.

Enter the function's formula.

For an example of entering correct syntax, see "How Can I Use the EVALUATE\_ PREDICATE Function with a Filter?"

Click **OK**.

The EVALUATE\_PREDICATE function is displayed in the Filters pane.

## Applying a Named Filter to an Analysis

Use the following procedure to apply a named filter to an analysis.

#### To apply a named filter to an analysis:

- 1. Create or open the analysis to which you want to add a named filter.
- Within the Analysis Editor: Criteria tab, locate the "Catalog pane" and navigate to the appropriate folder that holds the named filter. Filters are usually saved within the Subject Area subfolder. For example, Shared Folders/Sales/Subject Area Contents/Paint/region\_filter or My Folders/Subject Area Contents/Paint/my\_ region\_filter.

- **3.** Select the named filter and click the **Add More Options** button. The "Apply Saved Filter dialog" is displayed.
- **4.** Specify how you want to add the named filter to the analysis. You can select one or both of the following options:
  - Select the **Clear all existing filters before applying** box to remove all existing filters from the analysis before adding the named filter.
  - Select the Apply contents of filter instead of a reference to the filter box to copy the actual contents of the filter to the analysis. Copying the contents enables you to manipulate the filter criteria without altering the saved filter. When you clear the **Apply contents of filter instead of a reference to the** filter box, a reference to the filter is added to the analysis. From the analysis, you can view but not alter the named filter's contents.
- 5. Click OK.

The filter is displayed in the Filters Pane.

## **Combining and Grouping Column Filters**

Combining and grouping column filters enables you to create complex filters without requiring you to know SQL statements.

#### To combine a column filter with other column filters:

- 1. Create or open a named filter or analysis that contains an inline filter.
- 2. If you are working with a named filter, then locate the Saved Filter pane and confirm that the filter contains two or more filter items. If you are working with an inline filter, then locate the Filters Pane and confirm that the filter contains two or more filter items.

After you add the second filter item, the AND operator is displayed before the second filter item.

**Note:** If you want to group filters, then the filter must contain three or more filter items.

- **3.** To change an **AND** operator to an **OR** operator, click the word **AND**. You can toggle between AND and OR this way. Note the following information:
  - The AND operator means that the criteria specified in each filter must be met. This is the default method for combining column filters.
  - The **OR** operator means that the criteria that is specified in at least one of the column filters must be met.
- 4. As you add filter items, click AND and OR operators as necessary to construct the appropriate filter combinations.
- **5.** Save the filter in one of the following ways:
  - From the Analysis Editor, you can select **Save Analysis** to save the filter as an inline filter.
  - From the Filter Editor, you can select **Save Filter** to save the filter as a named

For more information, see "Saving Objects as Inline or Named".

## Using a Saved Analysis as a Filter

You can create a filter based on the values that are returned by another analysis. Any saved analysis that returns a column of values can be used to filter the matching column in an analysis.

#### To create a filter based on the results of another saved analysis:

- Create or open a named filter or analysis that contains an inline filter.
- If you are working with a named filter, then locate the Saved Filter pane and from the "Subject Areas pane", select the column for which you want to create a filter.

If you are working with an inline filter, then locate the Filters Pane, and from the Filters Pane toolbar, click the Create a filter for the current Subject Area button and select the column for which you want to create the filter.

The "New Filter dialog" is displayed.

- 3. In the Operator field, select is based on the results of another analysis.
  - The Saved Analysis, Relationship, and Use values in Column fields are displayed.
- 4. In the **Saved Analysis** field, either enter the complete path to the saved analysis or click the **Browse** button to locate the analysis upon which to base the filter.
  - The column names from the saved analysis are displayed in the Use Values in **Column** drop-down list.
- 5. Select a column name from the Use Values in Column field, and in the Relationship field, select the appropriate relationship between the results and the column to be filtered.
- 6. Click OK.

## Creating and Editing the SQL Statements for a Column Filter in an **Analysis**

You can create and edit the logical SQL WHERE clause to be used as a filter. While generally not necessary, this feature is available for users who want advanced filtering capability. For descriptions of SQL clauses, see Appendix A, "Logical SQL Reference."

**Note:** After you convert a filter to SQL statements, you can view and edit the filter item as SQL statements in the Advanced SQL Filter dialog, only. You can no longer view and edit the filter in the Edit Filter dialog.

#### To create and edit the SQL syntax of a column filter:

- 1. Create or open a named filter or an analysis that contains an inline filter.
- **2.** If you are working with a named filter, then locate the Saved Filter pane and from the "Subject Areas pane", select the column for which you want to create a filter.

If you are working with an inline filter, then locate the Filters Pane, and from the Filters Pane toolbar, click the Create a filter for the current Subject Area button and select the column for which you want to create the filter.

The "New Filter dialog" is displayed.

- Specify the filter's criteria and select **Convert this filter to SQL**.
- 4. Click OK.
  - The "Advanced SQL Filter dialog" is displayed.
- Enter your modifications in the **SQL** field, and click **OK**. Not that after you convert the filter to a SQL statement, you can no longer view and edit the filter in the Edit Filter dialog.

## Working with Groups and Calculated Items

You can create a group or calculated item as a way to display data in a table, pivot table, or graph. Groups and calculated items allow you to add new "members" to a column, when those members do not exist in the data source. These members are also known as "custom members."

- A group is a static list of members that you select or a static or dynamic list that is generated by selection steps. A group is represented as a member. You can drill in a group that was created for a hierarchical column but not in one that was created for an attribute column.
  - A group uses the existing aggregation function of the measure column with which it is displayed. The aggregation is performed up from the lowest detail level in the Oracle BI Server, but no values are double-counted.
- A calculated item is a computation between members, which is represented as a single member that cannot be drilled. When you create a calculated item, you add a new member in which you have selected how it will be aggregated, such as Sum or Average or a custom formula. The calculation is performed at the aggregated level, not at the lowest detail level.

Both groups and calculated items become selection steps for the analysis. Therefore, they apply to all views for that analysis. Both groups and calculated items can be saved as inline or named objects. For information, see "Saving Objects as Inline or Named".

### What are Groups?

A group is a user-defined member of a column. A group can be a list of members or a set of selection steps that can be executed to generate a list of members. All the members must be from the same attribute column or hierarchical column, and in a hierarchical column, members can be from different hierarchy levels. Groups are always displayed at the bottom of the column list in the order in which they were added (as shown in the Selection Steps pane). Groups can contain members or other groups.

You can save a group to the catalog and re-use it. For example, you can apply a group to analysis and dashboard column prompts or variable prompts. If a group is applied to a prompt, then the prompt presents either the group as a choice list option or members of the group as choice list options to the user at runtime. See "Overriding a Selection Step With a Column Prompt" for information on overriding selection steps with prompts when the user selects groups or column members.

#### What are Calculated Items?

A calculated item is a calculation between members, which is represented as a single member. A calculated item allows you to override the default aggregation rule that is specified in the Oracle BI repository, and for an existing analysis, the aggregation rule

chosen by the designer. You can define a calculated item using a custom formula (which is the default) or by combining selected members with a function (for example, SUM).

A calculated item is a user-defined member of a column. A calculated item can contain members or other calculated items. Calculated items are always displayed at the bottom of the column list in the order in which they were added (as shown in the Selection Steps pane). You can save a calculated item to the catalog and re-use it.

A calculated item is useful when you want to view and manipulate a set of members as a single entity. For example, you might define calculated members for the following:

- Key accounts in a geographic region
- High-end products
- Non-standard time periods, such as the first three weeks in September

You can create calculated items for columns in various places. Calculations differ from the default aggregation rules that are applied to measures, as described in "Adding Totals to Tables and Pivot Tables". Internally, calculated items are processed as SQL SELECT statements, and the indicated functions are performed on the result set. For more information about SQL functions, see Appendix A, "Logical SQL Reference.".

#### How Will Calculated Items Created in Previous Releases Be Upgraded?

In previous releases of Oracle BI EE, when you created a calculated item in a pivot table, that calculated item applied only to that pivot table for that analysis. If you upgrade from a previous release, then all calculated items are automatically converted to selection steps, which apply to all views for an analysis.

For more information, see "What are Filters and Selection Steps?"

### Creating Groups and Calculated Items

Use the following procedure to create a calculated item or group.

#### To create a calculated item or group:

1. Click the button to create a new calculated item or group.

The button is available in multiple locations. The following list provides a few of these locations:

- In the toolbar of the view editor, click the **New Calculated Item** button or the New Group button.
- In the Layout pane, in the *<view-type>* Rows or Columns area, click the **More** Options button to the right of a column name, then select New Calculated Item.

You can also create calculated items and groups by clicking the **Then**, **New Step** link in the "Selection Steps pane".

- 2. Complete the appropriate dialog, either "New Calculated Item dialog" or "New Group dialog".
- **3.** When the calculated item or group is complete, click **OK**.

If any errors are detected, then a message will be displayed. Correct the error and click **OK** again.

### Editing Groups and Calculated Items

You can edit groups and calculated item in various ways:

- In the "Selection Steps pane", click the link for the calculated item or group, then click **Edit** to display the appropriate dialog.
- If you have saved the object to the catalog, then select the object in the Catalog pane and click **Edit** to display the appropriate dialog.

The value of a group or calculated item might be affected by filters and selection steps, as described in the following list:

- Filters A group or calculated item is evaluated using only those members that have not been removed using filters. For example, if you have a calculated item for SUM(EAST + WEST) but WEST is removed through a filter, then only the EAST sum is included for the calculated item. If all members have been removed, then a null value is returned, which shows as an empty cell in a table or pivot table.
- Selection steps When you create selection steps, you can add a group or a calculated item in a step. Subsequent Keep Only or Remove steps might reference members that were included in the group or calculated item.
  - A group list is affected by members that are kept or removed in subsequent steps, but the group outline value remains the same. For example, suppose the MyNewYork group contains Albany and Buffalo and its value is 100. Suppose Albany is removed in a later step. The value of the MyNew York group remains at 100, but Albany is no longer listed with the group.
  - A calculated item is not affected by members that are kept or removed in subsequent steps, because removals can affect the components of the formula.

### Adding a Group to Another Analysis

You can add a group (also known as a "saved selection" in other products) to the same column on which it was created in another analysis. The group can be either a list of members or a set of selection steps. For information on these groups, see "Saving Selection Steps as a Group Object".

The following procedure describes how to add the group using the Results tab, but you can do so anywhere that the Catalog pane is displayed. You can also add a group using the following means:

- In the Edit Member Step dialog, select Start with Group or Calculated Item in the **Action** box, then select the group from the Catalog pane in the Available list.
- In the Selection Steps pane, click **Then**, **New Step** for the appropriate column, select Add Groups or Calculated Items, select Select Existing Groups and **Calculated Items**, and select the group in the resulting dialog.

#### To add a group to another analysis via the Catalog pane:

- On the Results tab, display an analysis that contains the same column to which you want to apply the selections from a group.
- Locate the Catalog pane and navigate to the appropriate folder that holds the saved group.
- 3. Select the group and click the **Add More Options** button in the toolbar of the Catalog pane.
- **4.** Select one of the following:

- **Add** to add the group itself, which generates an outline value for the group. In the table or pivot table, you see the group name, which can be expanded to see its member values. (Default)
- **Add Members** to add only the groups members to the analysis. You will not see the outline value.

The group or its members are included as an "Add" step on the Selection Steps pane. You can reorder the steps as appropriate.

### **Nesting Groups and Calculated Items**

As you work with groups and calculated items, you might want to "nest" them; that is, create a group within a group, for example. The following list provides various scenarios for nesting groups and calculated items:

- Groups can be nested; that is, they can include other groups. Nested groups are "flattened." For example, suppose that the my\_favorite\_countries group includes the my\_favorite\_cities group. When you display and expand the my\_favorite\_ countries group in a table, you will not see the my\_favorite\_cities group. Instead, you will see the member values of the my\_favorite\_cities group.
- Calculated items can be nested; that is, they can include other calculated items.
- Groups cannot contain calculated items nor can calculated items contain groups.
- When you work with selection steps:
  - You can save selection steps that include groups or calculated items as either a series of steps whose results are generated at runtime or as results that are static and are redisplayed each time.
  - You can apply a group that is a saved selection of steps, using the Catalog pane. If you do so when the saved selection contains a step for a calculated item, then you can only add the members of the group. You cannot add the group itself.

## **Examples of Calculated Items**

The examples and explanations in this section assume that you have a basic understanding of SQL statements and their syntax. The syntax shown in these examples applies to the Custom Formula function in the "New Calculated Item dialog". The examples are hypothetical. Not all possible calculated items are shown.

Example 5–1 shows the code required to obtain the value of the current measure, such as dollar sales, for each of the products SoftDrinkA, SoftDrinkB, and SoftDrinkC, and adds the values together.

This is equivalent to selecting Sum from the Function list, and then typing or clicking 'SoftDrinkA', 'SoftDrinkB', 'SoftDrinkC' to add them to the Function field.

#### Example 5-1 Obtaining the Value of the Current Measure

```
sum('SoftDrinkA','SoftDrinkB','SoftDrinkC')
```

Example 5–2 obtains the minimum current measure, such as dollars in sales, for SoftDrinkA or SoftDrinkB, whichever is lower.

In Example 5–1 and Example 5–2, each functional calculated item is performed for each member in the outer layer, such as the Product layer. For example, if Year and Product are positioned on an axis, and one of the preceding calculated items is built on the Product layer, then the results will be computed per year.

#### Example 5–2 Obtaining the Minimum Current Measure

```
min('SoftDrinkA','SoftDrinkB')
```

Example 5–3 obtains the values for each item in the outer layer, such as Year and Product, and adds them together.

Instead of specifying a named item for an attribute column, such as SoftDrinkA, you can specify \$n or \$-n, where n is an integer that indicates the item's row position. If you specify \$n, then the measure is taken from the nth row. If you specify \$-n, then the measure is taken from the nth to the last row.

For example, for dollar sales, \$1 obtains the measure from the first row in the data set, and \$-1 obtains the measure from the last row in the data set.

#### Example 5–3 Obtaining the Values of Each Item in the Outer Layer

```
sum(*)
```

Example 5–4 obtains the current measure, such as dollar sales, of the item from the first, second, and third rows, and sums them.

#### Example 5–4 Obtaining the Values of Measures and Summing Them

```
sum($1,$2,$3)
```

Example 5–5 adds sales of SoftDrinkA, SoftDrinkB, and SoftDrinkC. Note that the two calculated items shown in the example are equivalent. That is, Sum is the default function; therefore, it can be omitted.

#### Example 5-5 Adding Sales Values

```
'SoftDrinkA' + 'SoftDrinkB' + 'SoftDrinkC'
sum('SoftDrinkA','SoftDrinkB','SoftDrinkC')
```

Example 5-6 adds sales of SoftDrinkA with sales of diet SoftDrinkA, then adds sales of SoftDrinkB with sales of diet SoftDrinkB, and returns the maximum of these two amounts.

#### Example 5–6 Adding Sales Values and Returning the Maximum

```
max('SoftDrinkA' + 'diet SoftDrinkA', 'SoftDrinkB' + 'diet SoftDrinkB')
```

# **Prompting in Dashboards and Analyses**

This chapter explains how to construct prompts and use them to specify the data that is displayed in dashboards and analyses. This chapter contains the following topics:

- "What Are Inline and Dashboard Prompts?"
- "What are Column Prompts?"
- "Other Prompt Types"
- "What Types of User Input Options Can I Use With a Column or Variable Prompt?"
- "Can Dashboard Prompts and Analysis Prompts Interact?"
- "In What Order Does Oracle BI EE Apply Prompts with Default Values?"
- "Creating or Editing a Column Prompt"
- "Overriding a Selection Step With a Column Prompt"
- "Creating or Editing an Image Prompt"
- "Creating or Editing a Currency Prompt"
- "Creating or Editing a Variable Prompt"
- "Adding a Dashboard Prompt to a Dashboard or Dashboard Page"
- "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page"

### What Are Inline and Dashboard Prompts?

The two differences between inline prompts and dashboard prompts is where they are stored and their runtime behavior.

A prompt that is created at the analysis level is called an inline prompt because the prompt is embedded in the analysis and is not stored in the Oracle BI Presentation Catalog and, therefore, cannot be added to other analyses. Inline prompts provide general filtering of a column within the analysis. An inline prompt can be a column prompt, variable prompt, image prompt, or currency prompt. When you create an inline prompt, you select the columns and operators for the prompt and specify how the prompt is displayed to the users and how the users select the values. The user's choices determine the content of the analyses that are embedded in the dashboard. An inline prompt is an initial prompt, meaning that it only displays when the analysis is rendered. After the user selects the prompt value, the prompt fields disappear from the analysis and the only way for the user to select different prompt values is to re-run the analysis.

A prompt that is created at the dashboard level is called a dashboard prompt because the prompt is created outside of a specific dashboard and is stored in the catalog as an object, which can then be added to any dashboard or dashboard page that contains the columns that are specified in the prompt. A dashboard prompt can be a column prompt, variable prompt, image prompt, or currency prompt. Dashboard prompts are reusable, because you can create one prompt and use it many times. When the prompt object is updated and saved, those updates are immediately displayed in all dashboards where the prompt is used. A dashboard prompt is a specific kind of filter that, when created, saved, and applied to a dashboard or dashboard pages, can filter all or some of the analyses that are embedded in a dashboard or analyses that are embedded on the same dashboard page. A dashboard prompt is interactive and will always be displayed on the dashboard page so that the user can prompt for different values without having to re-run the dashboard. Users can create and save dashboard prompts to either a private folder or to a shared folder.

For more information about creating a column prompt, see "Creating or Editing a Column Prompt".

## What are Column Prompts?

This topic describes column prompts; however, Oracle BI Enterprise Edition also allows you, as the content designer, to create currency prompts, image prompts, and variable prompts. For more information about these types of prompts, see "Other Prompt Types".

A column prompt is the most common and flexible prompt type. A column prompt allows you to build very specific value prompts to either stand alone on the dashboard or analysis or to expand or refine existing dashboard and analysis filters. Column prompts can be created for hierarchical, measure, or attribute columns at the analysis or dashboard level.

You can create intelligent prompts that are specialized for the user's business needs and roles so that the user can quickly and accurately find the appropriate data that is needed to make a key business decision.

#### **How Do Column Prompts and Selection Steps Interact?**

Selection steps allow the user to provide or refine the data from attribute columns and measures columns and to provide a kind of filter for hierarchical columns. Note that selection steps are applied after data aggregation. When you create selection steps for a column, you have the option of overriding one step of the selection with a dashboard or analysis column prompt. All selection steps before and after the override step will be processed as specified, and the override step will be processed using the user-specified data values that are collected by the column prompt. Column prompts that are created for hierarchical columns allow you to include only the Choice List input option.

For more information about selection steps, see "What are Filters and Selection Steps?" and "Working with Selections of Data". For more information about creating a prompt that works with selections, see "Overriding a Selection Step With a Column Prompt".

### **Other Prompt Types**

In addition to column prompts, you can create currency prompts, image prompts, and variable prompts. The following list contains information about these prompt types.

For information about column prompts, see "What are Column Prompts?"

- **Currency Prompt** A currency prompt allows the user to change the currency type that is displayed in the currency columns on an analysis or dashboard. For example, suppose that an analysis contains the sales totals for a certain region of Canada in Canadian dollars. However, because the users viewing the analysis reside in the United States, they can use the currency prompt to change the sales totals from Canadian dollars to U.S. dollars. The prompt's currency selection list is populated with the currency preferences from the user's "My Account dialog: Preferences tab". Note that the Currency Prompt option is available only if the administrator has configured the userpref\_currencies.xml file as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition. For more information about creating a currency prompt, see "Creating or Editing a Currency Prompt".
- **Image Prompt** An image prompt provides an image that users click to select values for an analysis or dashboard. For example, in a sales organization, users can click their territories from an image of a map to see sales information, or click a product image to see sales information about that product. If you know how to use the HTML <map> tag, then you can create an image map definition. For more information about creating an image prompt, see "Creating or Editing an Image Prompt".
- **Variable Prompt** A variable prompt allows the user to select a value that is specified in the variable prompt to display on the dashboard. A variable prompt is not dependent upon a column, but can still use a column. For example, you can use variable prompts to allow the user to specify existing data to perform sales projections. For example, you can create a variable prompt called Sales Projections and specify the variable prompt values as 10, 20, and 30 percent. Then you create an analysis that contains the Region and Dollars columns. Within the Dollars column formula, you select the multiply operator and insert the Sales Projection variable. When users run this analysis, they can select a percentage by which to recalculate the Dollars column. For more information about creating a variable prompt, see "Creating or Editing a Variable Prompt".

## What Types of User Input Options Can I Use With a Column or Variable Prompt?

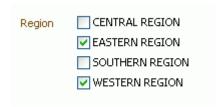
At design time, you must specify the prompt's user interface component. This component allows the user to enter a prompt value at runtime. You can select from several user input options. The Radio Button option allows the user to specify only one prompt value. The Check Boxes, Choice List, List Box, and Text Field options allow the user to select either one or multiple prompt values. The **Slider** option allows the user to select multiple values by specifying a range of values, or all values that are lesser than or greater than a specified value (for example, include everything equal to 200 and greater). Note that the input option types that are available depend upon the column type that you are working with. The following sections provide information about each input option.

#### **Check Boxes**

The Check Boxes input option provides the user with a visible list of all prompt values where a small, selectable box displays before each value item. This input option is suitable for a prompt that contains a smaller set of data. Note that the List Box input option is suitable for a prompt that contains a larger set of data. This user input type automatically allows the user to select one or more prompt values. To select a specific prompt value, the user scans the list and clicks the box that corresponds to a particular item.

Figure 6–1 shows an example of the **Check Boxes** user input option for a column or variable prompt. The column being prompted is Region, and each value option (Central Region, Eastern Region, Southern Region, and Western Region) is displayed next to a small box. To select a value, the user clicks the small box that is adjacent to the prompt value. This example shows that the Eastern Region and Western Region are selected, which illustrates that the user can select more than one prompt value.

Figure 6–1 Example of Check Box User Input Option



#### **Choice List**

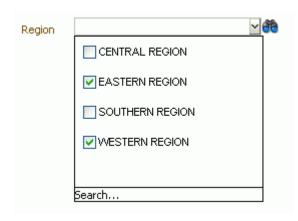
The Choice List input option provides the user with a collapsed list of all prompt values. This option is useful for a long list of values where you want to provide the user with the ability to search for a specific value. You can set up this user input type to accept only one prompt value or more than one prompt value.

This input option provides a field and list that, when the user clicks the down-arrow button, expands and contains a list of all prompt values. To select a specific prompt value from the expanded list, the user scrolls through the list (or searches the list) and clicks the box that corresponds to a particular value. If you are using this input option with hierarchical columns, then a search dialog is displayed where the user can search for the prompt values.

The number of choices that display in the **Choice List** is determined by the MaxDropDownValues configuration setting. The administrator can modify the setting. For information about this configuration setting, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

Figure 6–2 shows an example of the Choice List user input option for a column or variable prompt. The column being prompted is Region. The user accesses the list of values by clicking the down-arrow button next to the Region field. After accessing the list of values, each value option (Central Region, Eastern Region, Southern Region, and Western Region) is displayed next to a small box. To select a value, the user clicks the small box that is adjacent to the prompt value. This example shows that the Eastern Region and Western Region are selected, which illustrates that the user can select more than one prompt value. The user can also click the Search icon next to the Region field or at the end of the list of values to search for a specific value.

Figure 6–2 Example of Choice List User Input Option



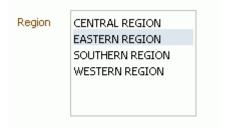
#### **List Box**

The **List Box** input option provides the user with a visible list of all prompt values. This input option is suitable for a prompt that contains a large set of data. Note that the Check Boxes input option is suitable for a prompt that contains a smaller set of data. You can set up this user input type to allow the user to select only one prompt value or more than one prompt value by using Ctrl+ click or Shift+ click.

To select a specific prompt value, the user scans the list and selects the prompt value name (for example, Chicago), similar to how a user would click a hyperlink. The **List** Box option is very similar to the Check Boxes option, but the List Box option does not include a box before each value item.

Figure 6–3 shows an example of the **List Box** user input option for a column or variable prompt. The column being prompted is Region. The list contains each value option (Central Region, Eastern Region, Southern Region, and Western Region). To select a value, the user clicks a value. This example shows that the Eastern Region is selected.

Figure 6-3 Example of List Box Input Option



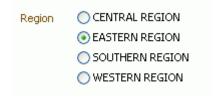
#### **Radio Buttons**

The **Radio Buttons** input option provides the user with a visible list of all prompt values where a Radio Button is displayed before each prompt value. This option type is useful for short lists of values where the user is to select only one prompt value. To select a prompt value, the user scans the list and selects the radio button that corresponds to a particular item.

Figure 6–4 shows an example of the **Radio Buttons** user input option for a column or variable prompt. The column being prompted is Region. The list contains each value option (Central Region, Eastern Region, Southern Region, and Western Region). To

select a value, the user clicks a radio button that corresponds to the value. This example shows that the Eastern Region radio button is selected.

Figure 6–4 Example of Radio Buttons Input Option

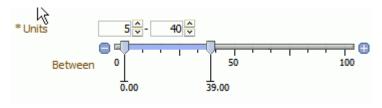


#### Slider

This option is not available for Variable Prompts. You can use the **Slider** input option for numerical data values only. Depending upon the operator that you select, this option allows the user to select multiple values by specifying a range of values, or all values that are lesser than, greater than, or equal to a specified value. You select the Slider option to provide the user with a number line representation of the range of prompt values. The number line displays the prompt values in a range, for example 10,000 to 20,000. To select a prompt value, the user can either click a value on the number line or click and drag the thumb to select the desired value. A spinner box is also provided with up and down-arrow buttons that the user can click to select the desired value. If you selected the **Slider** option and the **is between** operator for the prompt, then the user can click and drag two thumbs to select the desired range of values for the prompt. Two spinner boxes are provided where you can either type or use the up and down-arrow buttons to specify a range of values.

Figure 6–5 shows an example of the **Slider** user input option that will accept a range of values for a column or variable prompt. The column being prompted is Units. The slider itself is a number line and on the left end is the number label zero, in the middle is the number label 50, and on the right end is the number label 100. There are also two spinner boxes above the number line. From these spinner boxes, the user can specify either a single number (for example, 40 in the first spinner box and 40 in the second spinner box) or two numbers to specify a range of numbers (for example, 5 in the first spinner box and 40 in the second spinner box). To specify numbers in the spinner boxes, the user can either type the value or use the box's up and down arrows to scroll to the desired value. To select a value from the number line, the user clicks and drags the thumb to the desired value or clicks and drags both thumbs to specify the desired range of values. This example shows that value of 25 is selected.

Figure 6–5 Example of Slider Input Option



#### **Text Field**

The **Text Field** input option provides the users with a field into which they can type a specific prompt value. You cannot use this option for multiple prompt values. Only the field and the field label display for this option. This option is useful in instances where the user will know the prompt value and not have to search for it, or for prompts with numeric values. Note that the prompt value that you enter must match the column's

value. For example, if a column's data values include EASTERN REGION (in all capital letters), then the user must type EASTERN REGION into the text field. Numeric values cannot contain commas. If your repository is configured for double columns, and you are creating a prompt on a display column and specify **Text Field**, then filtering will be done on display values, not code values.

Figure 6–6 shows an example of the **Text Field** user input option for a column or variable prompt. The column being prompted is Region. The field next to the Region label is blank. In this field, the user enters the name of the Region (for example (central, eastern, southern, and western Region). This example shows that the Eastern region was entered into the text field.

Figure 6–6 Example of Text Field Input Option

| Region | Eastern |
|--------|---------|

## Can Dashboard Prompts and Analysis Prompts Interact?

You can combine and wire prompts in various ways to create dashboards and reports that allow users to quickly and easily request precise, meaningful data. Combining and wiring prompts allows you to specify how dashboard prompts interact with analysis prompts. Note that currency prompts and variable prompts cannot be combined or wired.

For example, you can create analysis A that contains information about the amount of product that is sold by region and to the Region column add the Is protected option and then add a Region prompt. You can then create analysis B that contains information about sales person by region and analysis C that contains information about city by region. You then create and save a dashboard prompt for Region. When you create a dashboard and add analyses A, B, and C and the Region dashboard prompt and run the dashboard, the dashboard prompt input will only drive what is displayed in analyses B and C. In this scenario, analysis A will not use the Region value that is specified in the dashboard prompt because you set analysis A's Region column filter value to **Is protected**. Therefore, the only way that analysis A will accept a prompt value is if the user specifies a prompt value in Region A's prompt fields.

There are various ways that you can combine and wire prompts. Table 6-1 provides a description of each method.

Methods of Combining and Wiring Oracle BI EE Analysis and Dashboard Prompts Table 6–1

| Wiring Method                                   | Description  |
|---|--|
| Auto wiring                                     | Oracle BI Enterprise Edition's auto wiring functionality assumes that you intended to create a functioning prompt for the column and, therefore, activates and applies the prompt. Oracle BI EE applies the auto wiring method when you create an analysis and add a column prompt or image prompt. This auto wiring method does not require the <b>is prompted</b> filter operator. Any unprotected filter can be used.   |
|   | Note that setting the filter operator to <b>is prompted</b> provides a more precise level of control between prompts and filters than the auto wiring method. For more information, see the "Filter value is set to <b>*Prompt User</b> " row in this table.   |
| Constrained Prompts                             | Use this method with several columns in a prompt to constrain the user's prompt choice based on subsequent choices. Constrained prompts can be set up on the "Prompt options dialog" to specify which prompt narrows the choices. For example, if one column filters on region and the next column filters on city, then the city column can be constrained to show only cities in the selected region.  |
| Filter operator is set to <b>is prompted</b>    | Use this method to build complex prompts that interact with filters. When you use this method, you have full control over how the dashboard prompts, inline prompts, and filters are applied to the embedded analysis.   |
| Selection Steps Override<br>with Prompts Option | Use this method to use an analysis or dashboard column prompt to provide the data choices for a specific member selection step on a hierarchical or attribute column. Since you cannot use filters with hierarchical columns, selection steps are the only way that you can use prompts with hierarchical columns. Only one selection step per column selection step set can be overridden with a prompt. All selection steps before and after the overridden step will be processed as specified. |
|   | For more information about selections steps, see "What are Filters and Selection Steps?" and "Working with Selections of Data". For more information about creating a prompt that works with selections, see "Overriding a Selection Step With a Column Prompt".   |
| Protected versus<br>Unprotected filters         | Use this method to determine whether the dashboard prompt can supply the inline prompt's value when the corresponding column's filter value is set to something other than <b>Is prompted</b> . The unprotected and protected filter settings can be used when a dashboard prompt and inline prompt reside on the same dashboard and both prompts were created for the same column.  |
|   | When the column's filter value is unprotected, the dashboard prompt value determines the analysis' results. If the filter value is set to something other than <b>Is prompted</b> (for example, <b>Is equal to/is in</b> ) and the filter is set to protected filter, then the dashboard prompt cannot determine the report results.   |
|   | For more information about protecting a filter, see "Filters pane".  |

## In What Order Does Oracle BI EE Apply Prompts with Default Values?

Because prompting allows you to build flexible dashboards and analyses, it is important to understand how Oracle BI EE initiates a complex dashboard's prompts. The following list presents the order in which, at runtime, Oracle BI EE applies prompts with default values:

- Hidden prompts whose scope is the dashboard page. For more information about hidden prompts, see "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page".
- Hidden prompts whose scope is the whole dashboard.
- Prompts whose scope is the dashboard page. The precedence order of dashboard page prompts is unspecified.
- Prompts whose scope is the whole dashboard.
- Prompts, either inline or named, whose scope is the analysis.

## Creating or Editing a Column Prompt

A column prompt allows users to select the values for populate a column in a dashboard or analysis. Use the following procedure to create or edit a named column prompt that you can apply to one or more dashboards, or to create or edit an inline column prompt that is embedded in an analysis. This procedure does not include information about selection steps or hierarchical columns. For information about column prompts and selection steps, see "Overriding a Selection Step With a Column Prompt".

#### To create or edit a column prompt:

- To create a dashboard prompt, use the following sub-procedure.
  - Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the **New** menu to access the menu, and select **Dashboard Prompt**. From the Select Subject Area menu, select the subject area for which you want to create a prompt. The "Definition pane" is displayed.
  - **b.** Click the **New** toolbar button in the Definition Pane to access the prompt type selection list. From the list, select Column Prompt. The "Select Column dialog" is displayed.
  - Select a column and click **OK**. The "New Prompt dialog" displays.
    - If your repository is configured for double columns, then ensure that you select the correct display column. For information on double columns, see "Understanding the Double Column Feature".
    - The number of columns that you include in a prompt can affect performance. In general, you should limit the number of columns to as few as possible.
    - If you are creating a dashboard prompt and want to add or remove related subject areas, then click the **Select subject area** button in the "Select Column dialog" to display the "Add/Remove Subject Areas dialog".
- To create an inline prompt, use the following sub-procedure.
  - **a.** Create a new analysis or access an existing analysis for which you want to create a prompt. Click the Prompts tab. The "Definition pane" is displayed.
  - **b.** Click the **New** toolbar button in the Definition Pane to access the prompt type selection list. From the list, select **Column Prompt**. The analysis' selected columns are displayed in the cascading menu that is adjacent to the Column Prompt selection item.

If the column that you want is not available from the list, then you can click the More Columns options in the cascading list and select the appropriate column from the "Select Column dialog".

Select a column. The "New Prompt dialog" displays.

If you want to create the prompt for a column that is not displayed in the column list, then select the **More Columns...** option. The "Select Column dialog" is displayed where you can browse for and select a column.

If your repository is configured for double columns, then ensure that you select the correct display column. For information on double columns, see "Understanding the Double Column Feature".

The number of columns that you include in a prompt can affect performance. In general, you should limit the number of columns to as few as possible.

If you are creating a dashboard prompt and want to add or remove related subject areas, then click the Select subject area button in the "Select Column dialog" to display the "Add/Remove Subject Areas dialog".

- 3. (Optional) Click the Edit Formula button to display the "Edit Column Formula dialog: Column Formula tab" where you can modify the formula for the column.
- **4.** In the **Label** field, change the default label, if necessary, by entering a caption for the column filter prompt. The caption displays as the prompt's field label. You can include HTML markup tags in the caption, such as <b>, <font>, and .
- 5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.
- **6.** From the **Operator** list, select the operator to use.
- In the User Input field, select how you want the prompt interface to ask the user for input (for example, prompt the user with a radio button to select only one prompt value). Note that the column type determines the user input options from which you can select.
- Within the Options section, select prompt options to specify how you want the list values to be displayed to the user, as well as how you want the user to interact with the prompt. The prompt options vary depending on the user input type and list values type that you selected. For more information about the individual prompt options, see "New Prompt dialog".
- In the **Default selection** field, select the prompt value or values that you want users to see initially. If you select a default type, then a field is displayed where you can either select specific values, or specify how you want the default values to be determined. For example, if you select **SQL Results**, you must then supply a SQL statement to generate the list of values.
- **10.** Click **OK**. The prompt is displayed in the "Definition pane".
- **11.** Save the prompt. Note the following options:
  - If you are creating a dashboard prompt, then click the **Save** button in the Prompt's Editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.
  - If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from the Oracle BI Server or SQL Server, then the dashboard prompt's name must match the name of the report's parameter.
  - If you are creating an inline prompt, then save the analysis.
- **12.** Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.
- **13.** To specify that the selected prompt and all other prompts that follow it should be displayed in a new column on the prompt selection page, click the New Column check box that corresponds to where you want the prompts to be displayed in a new column.

**14.** To preview how the prompt will display on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

**Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

## Overriding a Selection Step With a Column Prompt

Use the following procedure to create a selection step with a column prompt override. You can override a selection step with either a dashboard or an analysis prompt. The following list provides examples of overriding selection steps with prompts when the user selects groups or column members:

- One or more groups, such as My Regions and My Cities, can override a selection step only of the Add type.
- One or more members, such as Central and Eastern, can override a selection step of any type.
- One or more groups *and* one or more members, such as My Regions and Central, can override a selection step of any type. However, groups are ignored and members are supported.

For more information about using a column prompt to override a selection step, see the following topics:

- "Other Prompt Types"
- "What are Filters and Selection Steps?"
- "Working with Selections of Data"

#### To create or edit a column prompt to override a selection step:

- 1. To create an analysis with selection steps, either create a new analysis or access an existing analysis to which you want to add selection steps. The Analysis Editor is displayed.
  - For more information about creating an analysis, see "Specifying the Criteria for Analyses".
- 2. After you have specified the columns for the analysis, navigate to the Selection Steps pane and specify the selection steps for the analysis.
  - For information about specifying selection steps, see "Working with Selections of Data".
- 3. Determine which selection step you want to override with a column prompt and click its **Edit** button. The New Member Step dialog is displayed.
- **4.** Select the **Override with prompt** box. Click **OK** and save the analysis.

**Note:** The **Override with prompt** box is not available in certain circumstances. It is unavailable for a rank template (for example, is ranked first or is ranked last) within a conditional selection step. It is also unavailable for a match template for a hierarchical column.

5. If needed, create either a named or inline prompt. For information, see "Creating or Editing a Column Prompt".

## **Creating or Editing an Image Prompt**

An image prompt provides users with an image that contains sections or areas that they can click to select a specific prompt value. For example, an image prompt can be a map of the United States with sections that represent the North, South, East, West, and Central sales divisions. Users can then click the divisions that correspond to the sales information that they want to view in the dashboard or analysis.

You can apply image prompts to one or more dashboards, or embed them in analyses. Use the following procedure to create or edit an image prompt.

#### To create or edit an image prompt:

- **1.** To create a named image prompt, use the following sub-procedure.
  - **a.** Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the New menu to access the menu, and select **Dashboard Prompt**. The Select Subject Areas menu is displayed.
  - **b.** From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.
- To create an inline prompt, either create a new analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor", click the Prompts tab. The "Definition pane" is displayed.
- 3. Click the **New** button in the Definition Pane. From the list, select **Image Value** Prompt.
  - The "Image Map Prompt Properties dialog" is displayed.
- **4.** Enter a caption for the image prompt in the **Caption** field. The caption will display as the prompt's field label. You can include HTML markup tags in the caption, such as <b>, <font>, and .
- 5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is shown when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.
  - The descriptions will also be displayed when administrators view the stored prompt object from the Catalog Manager.
- Enter the location and name of the image in the **Image URL** field.
  - The image file must reside on a web server. Oracle recommends that you put the image files in the directory that contains all web resource files (for example, app\res\region3.jpg). Placing the image files with the web resource files prevents a security warning message from displaying when the user accesses the image from the dashboard or analysis.
  - However, if you are using a web server, such as WebLogic, where the resource files are located in the deploy directory, you must put the image file in the deploy directory and the directory that contains all web resource files.
- 7. Enter the appropriate HTML <map> tags and data in the HTML field. In the map tags, indicate the map region's shape, X and Y coordinates, and region name. For example:

```
<MAP Name="mymap">
<AREA Shape="poly" Coords="70,84,51,300,455"
```

```
Href="http://www.map.com/region1.html">
<AREA Shape="poly" Coords="25,180,125,280,485,668"</pre>
  Href="http://www.map.com/region2.html">
<AREA Shape="poly" Coords="152,106,186,225,340,193"</pre>
  Href="http://www.map.com/region3.html">
<AREA Shape="poly" Coords="675,763,929,286,10,908"</pre>
  Href="http://www.map.com/region43.html">
</MAP>
<IMG Src="../images/imagemap.gif" Width="500" Height="300"</pre>
   Alt="Image Map" Usemap="#mymap" Ismap>
```

**8.** To extract the image map information from the HTML, click **Extract Image Map** from HTML.

The Image Map Prompt Properties dialog expands to show the area titles, shapes, and coordinates that were entered in the HTML field.

For each area, in the **Column** field, enter the name of the column to pass when a user clicks it, and the value to use.

**Note:** The column must be a fully qualified column name in the format Folder.Column Name.

- Place double quotes around any column names that contain spaces. For example:
  - "Country name"
  - "Units shipped"
- **9.** Click **OK**. The prompt is displayed in the "Definition pane".
- **10.** Save the prompt. Note the following options:
  - If you are creating a dashboard prompt, then click the **Save** button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.
  - If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from the Oracle BI Server or SQL Server, then the dashboard prompt's name must match the name of the report's parameter.
  - If you are creating an inline prompt, then save the analysis.
- 11. Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.
- **12.** If you want the selected prompt and all other prompts that follow it to be displayed in a new column on the prompt selection page, then click the **New Column** check box that corresponds to where you want the prompts to be displayed in a new column.
- **13.** To preview how the prompt will be displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

**Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

## Creating or Editing a Currency Prompt

A currency prompt allows users to change the currency type that is displayed in the dashboard or analysis. When applied to a dashboard or embedded in an analysis, the prompt provides users with a list where they can select a currency. The currency types in this list are specified by the administrator in userpref\_currencies.xml. The same list of currencies is displayed in the "My Account dialog: Preferences tab".

Use the following procedure to create a currency prompt that you can apply to one or more dashboards, or to create a currency prompt that is embedded in an analysis.

#### To create or edit a currency prompt:

- **1.** To create a named currency prompt, use the following sub-procedure.
  - **a.** Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover the mouse pointer over the New menu to access the menu, and select **Dashboard Prompt**. The Select Subject Areas menu is displayed.
  - **b.** From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.
- 2. To create an inline prompt, either create a new analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor", click the Prompts tab. The "Definition pane" is displayed.
- **3.** Click the **New** button from the Definition Pane. From the list, select **Currency** Prompt.

The "New Prompt dialog" is displayed.

**Note:** The Currency Prompt option is available only if the administrator has configured the userpref\_currencies.xml file as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

- 4. Enter a label for the currency prompt in the Label field. The label is displayed as the prompt's field label. You can include HTML markup tags in the caption, such as <b>, <font>, and .
- 5. In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.
  - The descriptions will also be displayed when administrators view the stored prompt object from the Catalog Manager.
- **6.** Click **OK**. The prompt displays in the "Definition pane".
- **7.** Save the prompt. Note the following options:
  - If you are creating a dashboard prompt, then click the Save button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that

- are saved in shared folders are available to other users that have permission to access the object.
- If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from the Oracle BI Server or SQL Server, then the dashboard prompt's name must match the name of the report's parameter.
- If you are creating an inline prompt, then save the analysis.
- Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.
- If you want the selected prompt and all other prompts that follow it to be displayed in a new column on the prompt selection page, then click the **New** Column check box that corresponds to where you want the prompts to be displayed in a new column.
- **10.** To preview how the prompt will be displayed on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the **Preview** button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

**Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

## Creating or Editing a Variable Prompt

Use the following procedure to create a variable prompt that you can apply to one or more dashboards, or to create a variable prompt that is embedded in an analysis. For more information about variable prompts, see "Other Prompt Types". For more information about variables, see "Using Variables".

#### To create or edit a variable prompt:

- To create a named variable prompt, use the following sub-procedure.
  - **a.** Navigate to the Oracle BI Enterprise Edition Home page, locate the global header, hover over the New menu to access the menu, and from the menu select **Dashboard Prompt**. The Select Subject Areas menu is displayed.
  - **b.** From the Select Subject Area menu, select the subject area for which you want to create the prompt. The "Definition pane" is displayed.
- To create an inline prompt, either create a new analysis or access an existing analysis for which you want to create a prompt. In the "Analysis editor", click the Prompts tab. The "Definition pane" is displayed.
- **3.** Click the **New** button in the Definition Pane. From the list, select Variable Prompt. The "New Prompt dialog" is displayed.
- **4.** In the **Prompt for** field, select the variable type that you are creating and then enter the name of the variable.
- **5.** In the **Label** field, enter a caption for the variable filter prompt. The caption is displayed as the prompt's field label. You can include HTML markup tags in the caption, such as <b>, <font>, and .

- **6.** In the **Description** field, enter a short description for the prompt. This description is displayed as tooltip text, which is displayed when the user hovers the mouse pointer over the prompt's label in the dashboard or analysis.
  - The descriptions will also be displayed when administrators view the stored prompt object from the Catalog Manager.
- 7. In the **User Input** field, select how you want the prompt interface to ask the user for input. For example, prompt the user with a radio button to select only one prompt value.
- **8.** If you selected either the **Choice List**, **Check boxes**, **Radio buttons**, and **List box** user input type, then you must also specify the prompt's list of values. For more information, see "New Prompt dialog".
- **9.** Within the Options section, select the prompt options. The prompt options vary depending on the user input type that you selected. The prompt options allow you to further specify how you want the user to interact with the prompt (for example, whether user input is required).
- 10. In the **Default selection** field, select the prompt value that you want users to see initially. If you select a specific value, then the **Default Value** field is displayed in which you can enter a value.
- **11.** Click **OK**. The prompt is displayed in the "Definition pane".
- **12.** Save the prompt. Note the following options:
  - If you are creating a dashboard prompt, then click the **Save** button in the prompt's editor, specify the folder in which you want to save the prompt, and give the prompt a descriptive name. Note that dashboard prompts that are saved in personal folders are available only to you. Dashboard prompts that are saved in shared folders are available to other users that have permission to access the object.
  - If you are saving a dashboard prompt for use with an Oracle BI Publisher report that receives its data from the Oracle BI Server or SQL Server, then the dashboard prompt's name must match the name of the report's parameter.
  - If you are creating an inline prompt, then save the analysis.
- **13.** Use the arrow buttons in the Definition Pane to reorder the selected prompt. Reordering the prompts controls the order in which the choices are displayed to users at runtime, so ensure that the order is logical, especially if you are creating constrained prompts.
- **14.** If you want the selected prompt and all other prompts that follow it to be displayed in a new column on the prompt selection page, then click the **New Column** check box that corresponds to where you want the prompts to be displayed in a new column.
- **15.** To preview how the prompt will display on the dashboard, either use the "Display pane" to preview the prompt with sample data, or click the Preview button (if available) in the Definition Pane toolbar to view the prompt with actual prompt values.

**Note:** If the **Preview** button is not available, then the administrator has suppressed its display.

## Adding a Dashboard Prompt to a Dashboard or Dashboard Page

Use the following procedure to add a dashboard prompt to a dashboard or dashboard page.

#### To add a dashboard prompt to a dashboard or dashboard page:

- 1. Create a new dashboard or open an existing dashboard and click the **Edit Dashboard** button. For more information about creating or editing a dashboard, see "Creating Dashboards".
- 2. In the Dashboard builder's Catalog pane, locate and drag and drop the analysis onto a section in the dashboard.
- 3. In the Dashboard builder's Catalog pane, locate and drag and drop the dashboard prompt onto a section in the dashboard.

**Tip:** If you do not want a new browser window to open after the user selects prompt values, then click the dashboard section's More **Option** button and select **Drill in Place**.

- **4.** Hover the mouse pointer over the prompt object in the Page Layout area to display the object's toolbar, click the **Properties** button, and select **Scope**. Note the following options:
  - If you select **Dashboard**, then the prompt affects all dashboard pages that contain the prompt. The prompt value that the user selects for the dashboard level prompt will override values for page level dashboard prompts.
  - If you select **Page**, then the dashboard prompt affects only the page or pages to which you add the prompt.

## Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page

Use the following procedure to add a hidden dashboard prompt to a dashboard or dashboard pages. At runtime, the hidden dashboard prompt sets the default values for all of the corresponding prompts on the dashboard or dashboard page, as well as the unprotected inline prompts that are located on the analyses on the dashboard or dashboard page.

#### To add a hidden dashboard prompt to a dashboard or dashboard page:

- Create and save a dashboard prompt, which contains specific data values, that you want to use as a hidden prompt. For more information about creating prompts, see "Creating or Editing a Column Prompt".
- 2. Create a new dashboard or open an existing dashboard and click the Edit **Dashboard** button. For more information about creating or editing a dashboard, see "Creating Dashboards".
- 3. In the "Dashboard builder", click the Tools button and select Dashboard **Properties**. The "Dashboard Properties dialog" is displayed.
- **4.** If you want to add the hidden prompt to the whole dashboard, then click the Filters and variables Edit button. The "Dashboard Filters and Variables dialog" is

If you want to add the hidden prompt to a dashboard page, then select the page from the "Dashboard Pages" table and click the Select a prompt to capture default filters and variables button, which is located above the "Dashboard Pages" table. The "Filters and Variables - page dialog" is displayed.

5. Click the **Embed New Hidden Dashboard Prompt** button to browse for and select the dashboard prompt. Click **OK**.

**Note:** You can add one or more hidden dashboard prompts to the dashboard or dashboard page.

**6.** In the Dashboard Properties page, click the **OK** button to save the dashboard's properties.

# Formatting Analyses, Views, and Dashboard **Pages**

This chapter explains how to apply formatting to analyses, views, and dashboard pages and contains the following topics:

- "What Can be Formatted?"
- "Formatting Columns in Analyses"
- "What is Cosmetic Formatting?"
- "Applying Conditional Formatting to Tables and Pivot Tables"
- "Custom Date and Time Format Strings"

### What Can be Formatted?

After you create and run an analysis, default formatting rules are applied to the analysis' results. Default formatting rules are based on cascading style sheets and XML message files. You can create additional formatting to apply to specific results. Additional formats help you to highlight blocks of related information and call attention to specific data elements. You can also use additional formatting to customize the general appearance of analyses and dashboards.

You can apply formatting to the following:

- Columns in analyses, as described in "Applying Formatting to Columns in Analyses".
- Views, as described in "Applying Formatting to Views".
- Dashboard pages, as described in "Applying Formatting to Dashboard Pages".

# **Applying Formatting to Columns in Analyses**

As you work with columns in an analysis, you can specify their formatting. The formatting that you apply is visible when the column is displayed in views such as tables and pivot tables. For information, see "Formatting Columns in Analyses".

### Applying Formatting to Views

You can apply formatting to views in the following ways:

In the View editor: When you edit a view in its editor, you can generally display various dialogs that allow you to format either the view itself or its pieces, as applicable. Formatting options are unique to the view type. Formatting that you specify in the view editor overrides any formatting that was specified for columns. In the Compound Layout: When you use the "Compound Layout", you can click a button on the toolbar of the container for each view to display a formatting dialog. Use that dialog to apply formatting to the view's container, such as to place a green background on the container for a table.

### Applying Formatting to Dashboard Pages

You can apply formatting to the page layout columns and sections of dashboard pages. When you edit a dashboard page, you can edit the properties of its columns and sections and apply cosmetic formatting. For information, see "What is Cosmetic Formatting?" and Chapter 4, "Building and Using Dashboards".

# **Formatting Columns in Analyses**

When you build an analysis, you can edit properties for columns to control their appearance and layout. You can also specify formatting to apply only if the contents of the column meet certain conditions. By default, the specifications for a column apply only to the current analysis.

If your account has the appropriate privileges, then you can save the user-specified column properties as the system-wide default settings to use every time that data from that column, or columns of that particular data type, is displayed in results. The properties that you can save as defaults include formatting ones and other properties such as those that affects interactions and data write-back.

Because groups and calculated items are simply members of their respective columns, they inherit the formatting from the column and follow the same precedence order as for other members, unless you specifically apply formatting to the groups or calculated items.

This section contains the following topics:

- "What Kinds of Formatting Can I Apply?"
- "Applying Formatting to a Column"
- "Saving Formatting Defaults"

# What Kinds of Formatting Can I Apply?

You can use the tabs in the "Column Properties dialog" to customize how content is displayed for columns in views. Hierarchy levels provide an additional detail of formatting for hierarchical columns.

The following list provides examples of the kinds of formatting that you can apply:

- Apply cosmetic formatting to the column or hierarchy level, such as font family
- Assign alternate folder and column heading names and apply custom formatting to them.
- Control the display of duplicate data, such as repeating column labels.
- Override the default formatting for columns and data values with custom formatting.
- Apply conditional formatting to the column or hierarchy level, which enables different formatting to be applied based on the values. For example, values greater than \$1 million can be formatted with a green color.

### Applying Formatting to a Column

You can use the following procedure to set default formatting for columns. You can override the default settings by formatting columns in editors for data views, such as tables.

#### To apply formatting to a column:

- Open the analysis in which you want to edit formatting and behavior in the "Analysis editor: Criteria tab".
- Add or locate the column or hierarchy level that you want to modify. (Expand a hierarchical column to see its levels.)
- Click the **Options** button to the right of the column name or hierarchy level name in the Selected Columns pane, and click Column Properties or Hierarchy Level **Properties.** The "Column Properties dialog" is displayed.
- Click the "Column Properties dialog: Style tab" and specify how you want each cell and its contents to be displayed in the analyses. For example, change the cell border to red and the cell content to be displayed in a 14-point Arial font.
  - For more information, see "What is Cosmetic Formatting?"
- Click the "Column Properties dialog: Column Format tab" to specify various properties such as those for heading names and value suppression.
- Click the "Column Properties dialog: Data Format tab" to specify how you want to override the data's default display characteristics. The options that display on this tab depend upon the data type (text, date and time zone, or numeric).
  - For more information, see "Custom Date and Time Format Strings".
- Click the "Column Properties dialog: Conditional Format tab" to add conditional formatting to a column or hierarchy level.
  - For more information, see "Applying Conditional Formatting to Tables and Pivot Tables".
- Optionally, click **Save as Default** and click the appropriate option to restore or to save defaults, if you have the appropriate privileges.
- **9.** Click **OK** to save your changes.

### Saving Formatting Defaults

When you use the tabs in the "Column Properties dialog" to customize how content is displayed for columns in views, you override the Oracle Business Intelligence style sheet and the system defaults for the column or hierarchy level.

You have the option of saving the modified properties for just the column or hierarchy level within the analyses, of saving the properties as system-wide defaults for the data type, or of saving the properties as system-wide defaults for the column or hierarchy level so that its formatting and behavior will be the same no matter in which analysis it displays. Anyone who uses this column or hierarchy level or a column or hierarchy level of this data type in subsequent analyses will, therefore, use the settings in the "Column Properties dialog" by default. To save system-wide properties, you must have the appropriate privileges.

The ability to set a system-wide default can provide consistency and save time within your organization. For example, suppose that your organization had decided to use Arial as the font family for all text columns in all analyses. Suppose that a decision is later made to switch to Times New Roman for all text columns. You can simply save

Times New Roman as the system-wide default for text columns. All existing analyses that contain text columns in which the font family is specified as Default (Arial) will be updated automatically.

# What is Cosmetic Formatting?

Cosmetic formatting affects the visual appearance of data in columns and hierarchy levels, views, and columns and sections on dashboard pages. You can apply cosmetic formatting, copy and paste cosmetic formatting attributes, and save a formatted analysis to use with the columns of another analysis.

You can display various dialogs that provide access to and control over various cosmetic attributes. Depending on the object that you are formatting, the dialog displays different options, such as font, cell, and border controls, background color, additional formatting options such as cell padding, and custom CSS style options for HTML.

### Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses

After you have customized the cosmetic appearance of an analysis using the Criteria tab and the Results tab and have saved it, you can import the formatting from the saved analysis and its views to new or existing analyses. This section contains the following topics:

- "Where is the Import Formatting Button?"
- "Which View Types Support Imported Formatting?"
- "How is Imported Formatting Applied?"
- "Importing Formatting Using a Saved Analyses"

#### Where is the Import Formatting Button?

You can use a saved analysis to modify the cosmetic appearance of other views by clicking the **Import Formatting** button. This button is available on the following toolbars:

- The Compound Layout toolbar When you click this button, the formatting is applied to all applicable views in the layout. See "Applying Formatting from Containers".
- The view editor toolbar When you click this button, the formatting is applied only to the view that you are editing. See "Which View Types Support Imported Formatting?"

#### Which View Types Support Imported Formatting?

The following list describes the components that support the use of a saved analysis for formatting other views:

- **View Types** You can import formatting from the following view types:
  - Legend Imports formatting for the legend title, the caption, and the legend container. Textual content is not imported.
  - Narrative Imports only the text font color. Textual properties such as prefix, postfix, and narrative texts are not imported.
  - Pivot table and table Imports formatting for the columns, greenbar specifications, sub-totals and grand totals, and section properties.

- Static Text Imports only the text font color. Textual content is not imported.
- Title Imports formatting for the title, logo, subtitle, start time, and Help URL.
- View Selector Imports only the caption formatting.
- **Compound Layout** You can import formatting that was specified after clicking the **Format Container** button for the view in the Compound Layout.

### **How is Imported Formatting Applied?**

Formatting is applied slightly differently depending on whether you are importing formatting that was applied to columns, to views, or to view containers in the Compound Layout.

**Applying Formatting from Columns** This functionality works best for views when attribute, measure, or hierarchical column numbers align precisely or in the case of a single column template that can be applied to all columns. If a single column exists in the saved analysis, then its formatting is applied to all columns in the tables and pivot tables of the target analysis.

For multiple columns, formatting is applied positionally, from left to right for column headings and values. A column that exceeds the number in the saved analysis gets the closest column's format repeated. For example, suppose the saved analysis contains four columns formatted with these colors in this order: red, green, blue, yellow. In the target analysis, its six columns would acquire these colors in this order: red, green, blue, yellow, yellow, yellow.

**Applying Formatting from Views** Formatting is applied to a view only if a view of that type already exists in the target analysis. The imported formatting applies to all views of that type in the target analyses. For example, suppose that a saved analysis contains a legend to which you have customized formatting. If you import that formatting into a target analysis that contains three legends, then all three legends inherit that formatting.

**Applying Formatting from Containers** In the Compound Layout, you can specify formatting properties (such as background color, borders, and padding) for view containers. When you import that container formatting using a saved analysis, the views in the target analysis inherit the exact container formatting properties as the views in the saved analysis.

The layout of the views in the two analyses need not be exactly the same for container formatting to work correctly. If the target analysis contains more views than the source analysis, then the extra views inherit the imported formatting. For example, suppose a saved analysis contains two tables that are stacked on top of each other in the Compound Layout. Suppose the target analysis contains four tables that are laid out two by two. The source analysis has only one "layout column" of two table views. The two tables in each of the first and second "layout columns" of the target analysis inherit the applied formatting.

#### Importing Formatting Using a Saved Analyses

To use a saved analysis to modify the cosmetic appearance of another analysis:

- Display either the analysis in which you want to import formatting in the "Analysis editor: Results tab", or display the view in its editor.
- Click the **Import Formatting** toolbar button.

**3.** In the "Select Analysis dialog", navigate to the saved analysis and click **OK**.

# **Applying Conditional Formatting to Tables and Pivot Tables**

In tables, pivot tables, and graphs, conditional formatting helps direct attention to a data element if it meets a certain condition. For example, you can show below-quota sales figures in a certain color, or display an image such as a trophy next to the name of each salesperson who exceeds quota by a certain percent.

This section describes how to apply conditional formatting in tables and pivot tables. For information on graphs, see "Graph Formatting Based on Columns" This section contains the following topics:

- "How is Conditional Formatting Applied?"
- "Can Conditional Formats Be Based on Another Columns?"
- "What Factors Affect Conditional Formats?"
- "Applying Conditional Formatting"
- "Example of Conditional Formatting for Ranking"

### How is Conditional Formatting Applied?

You apply conditional formatting by selecting one or more columns or hierarchy levels in the analysis to use, specifying the condition to meet, and then making specifications for font, cell, border, and style sheet options to apply when the condition is met. The conditional formats can include colors, fonts, images, and so on, for the data and for the cell that contains the data. Your specifications apply only to the contents of the columns or hierarchy levels in the tables and pivot tables for the analysis with which you are working.

You can add multiple conditions so that the data is displayed in one of several formats, based upon the value of the data. For example, below-quota sales can be displayed in one color, and above-quota sales can be displayed in another color. When you specify multiple conditions, all the conditions are verified and the formats are merged for the conditions that are true. In the event of a conflict when trying to merge multiple formats, the condition that is last verified as true affects the format that is displayed.

### Can Conditional Formats Be Based on Another Columns?

You can create conditional formats to apply to one column based on the values of a second column, for display in tables and pivot tables. For example, you can create a conditional format to color the Region column green when values of the Sales column are greater than \$30 million, as shown in Figure 7–1.

Year Region Dollars 1998 CENTRAL REGION 26615500.00 46093539.00 SOUTHERN REGION 27911089.00 36799957.00 1999 38316684.00 80360001.00 39586439.00 56479644.00 2000 CENTRAL REGION 6713243.00 EASTERN REGION 13748112.00 SOUTHERN REGION 6363689.00 WESTERN REGION 9495814.00

Figure 7–1 Conditional Formatting on the Region Column

You can create a condition using a column that is not displayed in views for the analysis, if you use the **Hide** option on the Column Format tab of the Column Properties dialog. If you place the column in the Excluded drop target of the Layout pane, then you cannot create a condition using that column.

Conditional formatting is applied based on the underlying value, even if you select the **Show Data As** options in the Layout pane to show the data as percentages or indexes.

#### What Factors Affect Conditional Formats?

The way that conditional formats are applied to columns depends on the factors that are described in the following list:

- "Layout, Order, and Conditional Formats"
- "Value Suppression and Conditional Formats"

#### Layout, Order, and Conditional Formats

The layout of the columns in the view affects the conditional formatting of the values of one column when the conditional format is based on another column. Changing the layout of the columns in the view can change the display of the conditional formats. For example, suppose that you specify a conditional format on the Region column where Year is 1999. If Year and Region are on opposite edges of the pivot table, then no conditional formatting is visible.

The order of the columns as they are displayed in the view also affects conditional formatting. The order in the view affects the "grain" at which the values are displayed. You can think of "grain" as a level of aggregation. The conditional format applies when the column to format is displayed at a finer grain or the same grain as the column on which the format is based. If the column being formatted is of a higher grain than the column on which the format is based, then the format applies only if the condition is based on a measure column. If the format is based on an attribute column and the column to format is displayed at a higher grain, then the conditional format will not apply.

For example, consider the table in Figure 7–2. A conditional format has been specified to color the Region column magenta when Year is 1999. Notice that no magenta coloring is visible, because Region is the first column in the table and so is displayed at a higher grain. (The Region column has its value suppression set to **Default**.) See "Value Suppression and Conditional Formats" for more information.

Figure 7–2 Columns with No Conditional Formatting Applied

| Region          | Year | Dollars     |
|-----------------|------|-------------|
| CENTRAL REGION  | 1998 | 26615500.00 |
|                 | 1999 | 38316684.00 |
|                 | 2000 | 6713243.00  |
| EASTERN REGION  | 1998 | 46093539.00 |
|                 | 1999 | 80360001.00 |
|                 | 2000 | 13748112.00 |
| SOUTHERN REGION | 1998 | 27911089.00 |
|                 | 1999 | 39586439.00 |
|                 | 2000 | 6363689.00  |
| WESTERN REGION  | 1998 | 36799957.00 |
|                 | 1999 | 56479644.00 |
|                 | 2000 | 9495814.00  |

Suppose that you change the order of the columns so that Year is the first column in the table. Then the Year column is displayed at a higher grain, and the appropriate conditional formatting is applied to the Region column. Figure 7–3 shows a table with the appropriate conditional formatting.

Figure 7–3 Conditional Formatting Based on Column Order

| Year | Region          | Dollars     |
|------|-----------------|-------------|
| 1998 | CENTRAL REGION  | 26615500.00 |
|      | EASTERN REGION  | 46093539.00 |
|      | SOUTHERN REGION | 27911089.00 |
|      | WESTERN REGION  | 36799957.00 |
| 1999 | CENTRAL REGION  | 38316684.00 |
|      | EASTERN REGION  | 80360001.00 |
|      | SOUTHERN REGION | 39586439.00 |
|      | WESTERN REGION  | 56479644.00 |
| 2000 | CENTRAL REGION  | 6713243.00  |
|      | EASTERN REGION  | 13748112.00 |
|      | SOUTHERN REGION | 6363689.00  |
|      | WESTERN REGION  | 9495814.00  |

Conditional formats can be displayed on any edge of the table or pivot table. On the Prompts drop target (also known as the "page edge"), the conditional format applies only to the column member that is currently selected for that target. For example, suppose that you have a Region column that has the members North, South, East, and West. Suppose the Region column is on the Prompts drop target for a pivot table and the conditional format is set to color the region name green if Sales is greater than \$10 million. If East and West are the only regions that meet that condition, then each one is colored green only when it is selected for the Prompts drop target.

#### Value Suppression and Conditional Formats

For tables, the value suppression setting in the "Column Properties dialog: Column Format tab" affects conditional formatting. If you set value suppression to **Repeat**, then the column that you are formatting is displayed at the detail grain of the view. No aggregation is needed on the column on which the format is based for applying the conditional format.

For example, consider the table in Figure 7–2. A conditional format has been applied to color the Region column magenta when Year is 1999. Notice that no magenta coloring is visible, because the value suppression is set to **Default**, which does not allow for repeating column values for the members of Region.

If the value suppression is set to **Repeat**, then column members are repeated and the appropriate conditional formatting is applied. Figure 7-4 shows a table with repeat value suppression.

Figure 7–4 Conditional Formatting for Repeat Value Suppression

| Region          | Year | Dollars     |
|-----------------|------|-------------|
| CENTRAL REGION  | 1998 | 26615500.00 |
| CENTRAL REGION  | 1999 | 38316684.00 |
| CENTRAL REGION  | 2000 | 6713243.00  |
| EASTERN REGION  | 1998 | 46093539.00 |
| EASTERN REGION  | 1999 | 80360001.00 |
| EASTERN REGION  | 2000 | 13748112.00 |
| SOUTHERN REGION | 1998 | 27911089.00 |
| SOUTHERN REGION | 1999 | 39586439.00 |
| SOUTHERN REGION | 2000 | 6363689.00  |
| WESTERN REGION  | 1998 | 36799957.00 |
| WESTERN REGION  | 1999 | 56479644.00 |
| WESTERN REGION  | 2000 | 9495814.00  |

### **Applying Conditional Formatting**

### To apply conditional formatting:

- 1. Open the analysis in which you want to edit formatting and behavior in the "Analysis editor: Criteria tab".
- Add or locate the column or hierarchy level that you want to modify. Click the **Options** button to the right of the column name in the Selected Columns pane, and click Column Properties or Hierarchy Level Properties. The "Column Properties dialog" is displayed.
- 3. Click the "Column Properties dialog: Conditional Format tab".
- Click **Add Condition**, then select the column to which to apply the condition.
- Complete the "New Condition dialog". You can click the **Edit Condition** button to the right of the condition name to display the "Edit Condition dialog".

**Note:** When you access the "New Condition dialog" from the Conditional Format tab, the dialog shows only the options that apply to conditional formats. For example, the Operator list shows the subset of operators that are used in conditional formats, and you can apply only presentation variables.

**6.** Complete the "Edit Format dialog" to apply formatting for the condition.

### Example of Conditional Formatting for Ranking

The following example describes how conditional formatting can be applied to results to show ranking.

Suppose an analysis includes ten ranking categories, with a value of 1 in the column indicating the worst ranking, and a value of 10 indicating the best ranking. You could create three conditional formats to show the following:

- One image to indicate a low rank for columns that contain 1, 2, or 3.
- Another image to indicate an average rank for columns that contain 4, 5, 6, or 7.
- A third image to indicate a high rank for columns that contain 8, 9, or 10.

In the Graphics dialog, selecting the Images Only image placement option would cause the columns to be displayed with only images, and not the ranking numbers, in the results.

# **Custom Date and Time Format Strings**

Custom date and time format strings provide additional options for formatting columns or hierarchy levels that contain time stamps, dates, and times. Use the "Column Properties dialog: Data Format tab" to locate the Custom Format field where you can set custom date and time format strings to a column or hierarchy level.

This section contains the following topics:

- "General Custom Format Strings"
- "ODBC Custom Format Strings"
- "Custom Format Strings for Integral Fields"
- "Custom Format Strings for Conversion into Hours"
- "Custom Format Strings for Conversion into Hours and Minutes"
- "Custom Format Strings for Conversion into Hours, Minutes, and Seconds"

### **General Custom Format Strings**

Table 7–1 shows the general custom format strings and the results that they display. These allow the display of date and time fields in the user's locale.

Table 7-1 General Custom Format Strings

|                        | •  |
|------------------------|--|
| General Format String  | Result   |
| [FMT:dateShort]        | Formats the date in the locale's short date format. You can also type [FMT:date].  |
| [FMT:dateLong]         | Formats the date in the locale's long date format.   |
| [FMT:dateInput]        | Formats the date in a format acceptable for input back into the system.  |
| [FMT:time]             | Formats the time in the locale's time format.  |
| [FMT:timeHourMin]      | Formats the time in the locale's time format but omits the seconds.  |
| [FMT:timeInput]        | Formats the time in a format acceptable for input back into the system.  |
| [FMT:timeInputHourMin] | Formats the time in a format acceptable for input back into the system, but omits the seconds.   |
| [FMT:timeStampShort]   | Equivalent to typing [FMT:dateShort] [FMT:time]. Formats the date in the locale's short date format and the time in the locale's time format. You can also type [FMT:timeStamp]. |

Table 7–1 (Cont.) General Custom Format Strings

| General Format String | Result  |
|-----------------------|---|
| [FMT:timeStampLong]   | Equivalent to typing [FMT:dateLong] [FMT:time]. Formats the date in the locale's long date format and the time in the locale's time format. |
| [FMT:timeStampInput]  | Equivalent to [FMT:dateInput] [FMT:timeInput]. Formats the date and the time in a format acceptable for input back into the system.         |
| [FMT:timeHour]        | Formats the hour field only in the locale's format, such as 8 PM.   |

### ODBC Custom Format Strings

Table 7–2 shows the ODBC standard type custom format strings and the results that they display. These strings display date and time fields according to the ODBC standard.

Table 7–2 ODBC Custom Format Strings

| ODBC Format String   | Result   |
|----------------------|--|
| [FMT:dateODBC]       | Formats the date in standard ODBC yyyy-mm-dd format (4-digit year, 2-digit month, 2-digit day).  |
| [FMT:timeODBC]       | Formats the time in standard ODBC hh:mm:ss format (2-digit hour, 2-digit minute, 2-digit second).  |
| [FMT:timeStampODBC]  | Equivalent to typing [FMT:dateODBC] [FMT:timeStampODBC]. Formats the date in yyyy-mm-dd format, and the time in hh:mm:ss format.                                   |
| [FMT:dateTyped]      | Displays the word <i>date</i> and then shows the date, in standard ODBC yyyy-mm-dd format. The date is shown within single quote characters (').                   |
| [FMT:timeTyped]      | Displays the word <i>time</i> and then shows the time, in standard ODBC hh:mm:ss format. The time is shown within single quote characters (').                     |
| [FMT:timeStampTyped] | Displays the word <i>timestamp</i> and then the timestamp, in standard ODBC yyyy-mm-dd hh:mm:ss format. The timestamp is shown within single quote characters ('). |

## **Custom Format Strings for Integral Fields**

Table 7–3 shows the custom format strings that are available when working with integral fields. These allow the display of month and day names in the user's locale.

Integral fields hold integers that represent the month of the year or the day of the week. For months, 1 represents January, 2 represents February, and so on, with 12 representing December. For days of the week, 1 represents Sunday, 2 represents Monday, and so on, with 7 representing Saturday.

Table 7–3 Format Strings for Integral Fields

| Integral Field Format String | Result   |  |
|------------------------------|--|--|
| [MMM]                        | Displays the abbreviated name of the month in the user's locale. |  |
| [MMMM]                       | Displays the full name of the month in the user's locale.        |  |

Table 7-3 (Cont.) Format Strings for Integral Fields

| Integral Field Format String | Result   |
|------------------------------|--|
| [DDD]                        | Displays the abbreviated name of the day of the week in the user's locale. |
| [DDDD]                       | Displays the full name of the day of the week in the user's locale.        |

### **Custom Format Strings for Conversion into Hours**

Table 7–4 shows the custom format strings that can be used to format data into hours. These can be used on the following kinds of fields:

- Fields that contain integers or real numbers that represent the time that has elapsed since the beginning of the day (12:00 AM).
- Fields where the output is in [FMT:timeHour] format, as described in Table 7–1, "General Custom Format Strings". (This format displays the hour field only in the locale's format, such as 8 PM.)

Table 7–4 Format Strings for Conversion into Hours

| Data Conversion Format String | Result   |
|-------------------------------|--|
| [FMT:timeHour]                | This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and formats the number of hours into an hh display, where hh is the number of hours. Fractions are dropped from the value. For example, a value of 2 is formatted as 2 AM, and a value of 12.24 as 12 PM.   |
| [FMT:timeHour(min)]           | This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and formats the number of minutes into an hh display, where hh is the number of hours. Fractions are dropped from the value. For example, a value of 2 is formatted as 12 AM, and a value of 363.10 as 06 AM.   |
| [FMT:timeHour(sec)]           | This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and formats the number of seconds into an hh display, where hh is the number of hours. Fractional hours are dropped from the value. For example, a value of 600 is formatted as 12 AM, a value of 3600 as 1 AM, and a value of a value of 61214.30 as 5 PM. |

### **Custom Format Strings for Conversion into Hours and Minutes**

Table 7–5 shows the custom format strings that can be used to format data into hours and minutes. These can be used on fields that contain integers or real numbers that represent the time that has elapsed since the beginning of the day (12:00 AM).

They can also be used where the output is in [FMT:timeHourMin] format, described in Table 7–1, "General Custom Format Strings". (This format displays the time in the locale's time format, but omits the seconds.)

Format Strings for Conversion into Hours and Minutes Table 7–5

| Data Conversion Format String | Result   |
|-------------------------------|--|
| [FMT:timeHourMin]             | This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and converts the value into an hh:mm display, where hh is the number of hours and mm is the number of minutes. Fractions are dropped from the value. For example, a value of 12 is formatted as 12:12 AM, a value of 73 as 1:13 AM, and a value of 750 as 12:30 PM.     |
| [FMT:timeHourMin(sec)]        | This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and converts the value into an hh:mm display, where hh is the number of hours and mm is the number of minutes. Fractions are dropped from the value. For example, a value of 60 is formatted as 12:01 AM, a value of 120 as 12:02 AM, and a value of 43200 as 12:00 PM. |
| [FMT:timeHourMin(hour)]       | This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and converts the number of hours into an hh:mm display, where hh is the number of hours and mm is the remaining number of minutes. For example, a value of 0 is formatted as 12:00 AM, a value of 1.5 as 1:30 AM, and a value of 13.75 as 1:45 PM.                        |

### **Custom Format Strings for Conversion into Hours, Minutes, and Seconds**

Table 7–6 shows the custom format strings that can be used to format data into hours, minutes, and seconds. These can be used on fields that contain integers or real numbers that represent time.

They can also be used where the output is in [FMT:time] format, described in "General Custom Format Strings". (This format displays the time in the locale's time format.)

Table 7–6 Format Strings for Conversion into Hours, Minutes, and Seconds

| Data Conversion Format String | Result   |
|-------------------------------|--|
| [FMT:time]                    | This assumes that the value represents the number of seconds that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 60 is formatted as 12:01:00 AM, a value of 126 as 12:02:06 AM, and a value of 43200 as 12:00:00 PM. |
| [FMT:time(min)]               | This assumes that the value represents the number of minutes that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 60 is formatted as 1:00:00 AM, a value of 126 as 2:06:00 AM, and a value of 1400 as 11:20:00 PM.    |
| [FMT:time(hour)]              | This assumes that the value represents the number of hours that have elapsed since the beginning of the day, and converts the value into an hh:mm:ss display, where hh is the number of hours, mm is the number of minutes, and ss is the number of seconds. For example, a value of 6.5 is formatted as 6:30:00 AM, and a value of 12 as 12:00:00 PM.                                     |

| Custom Date and Time Format Strings | Custom | Date | and | Time | Format | Strings |
|-------------------------------------|--------|------|-----|------|--------|---------|
|-------------------------------------|--------|------|-----|------|--------|---------|

# **Delivering Content**

This chapter provides information about delivering content using agents. It contains the following topics:

- "What Are Agents?"
- "What Are Alerts?"
- "How Agents Work"
- "What Is the Agent Editor?"
- "About Controlling Access to Agents"
- "How Will iBots Created in Previous Releases Be Upgraded?"
- "About Using Customization in Agents"
- "Creating Agents"
- "Viewing Summaries of Agent Settings"
- "Saving Agents"
- "Subscribing to Agents"
- "Displaying a List of the Agents That You Subscribe to or That You Own"
- "Unsubscribing from Agents"
- "Customizing Your Agent Subscriptions"
- "Disabling and Enabling Agents' Schedules"
- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"
- "Accessing and Managing Your Alerts"
- "Subscribing to an RSS Feed for Alerts"

## What Are Agents?

Agents enable you to automate your business processes. You can use them to provide event-driven alerting, scheduled content publishing, and conditional event-driven action execution.

You can choose:

- A schedule that the Agent will run on
- A data condition that determines what the Agent will do

- An analysis that can be distributed
- Actions that can be automatically executed depending on whether the data condition is met

Agents can dynamically detect information-based problems and opportunities, determine the appropriate individuals to notify, and deliver information to them through a wide range of devices (email, phones, and so on).

> **Note:** The delivery content of an agent is localized according to the preferred locale of the recipient. (Users specify their preferred locale in the "My Account dialog: Preferences tab".)

### What Are Alerts?

An alert is a notification generated by an agent that delivers personalized and actionable content to specified recipients and to subscribers to the agent.

You can see the alerts that have been delivered to you throughout Oracle BI Enterprise Edition, for example:

- In the Alerts section of the Home page.
- On the first page of My Dashboard. (An Alerts section is automatically added to the first page of My Dashboard, if you do not manually place one there.)
- On a dashboard page, if the content designer adds an Alerts section to the page. See "Adding Content to Dashboards".
- In the Alerts dialog displayed from the Alerts! button in the global header.
- In specified delivery devices, such as a phone. See "What Are Devices and Delivery Profiles?"

For more information, see "Accessing and Managing Your Alerts".

Figure 8–1 shows an example of an Alert delivered to the Alerts section of the Home page.

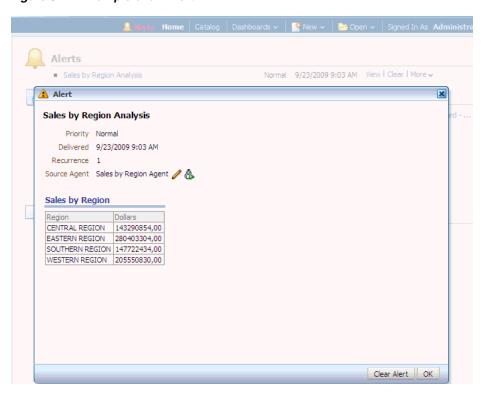


Figure 8-1 Example of an Alert

# **How Agents Work**

In the simplest format, an agent automatically performs a specified catalog analysis based on a defined schedule, and examines the results for a specific problem or opportunity. If the specific problem or opportunity is detected in the results, then an alert is generated and delivered to specified recipients and to subscribers to the agent, using the delivery options that are specified for each person.

For more information on alerts, see "What Are Alerts?" For more information on delivery options, see "What Are Devices and Delivery Profiles?"

To handle more complex requirements, agents can invoke actions that trigger other agents, scripts, Java programs, or applications. Results can be passed between agents, and to other applications or services through XML, HTML, or plain text. For example, an agent might run an analysis to identify all current product orders over a specified dollar amount that cannot be filled from a regional warehouse. The results can be passed to another agent that runs an analysis to locate alternative sources for these products. A final agent might be triggered to feed information into a corporate CRM system and to notify the appropriate account representatives of the alternative sourcing.

You might automatically be a recipient of alerts generated by some agents, and agents created by others might be available for you to subscribe to. You can also create your own agents if you have the appropriate permissions and responsibilities. Depending on the level of authority that you have, you can selectively share agents with others or make agents available for all users.

# What Is the Agent Editor?

The Agent editor lets you create agents to deliver personalized and actionable content to users. It also lets you view a summary of the current settings of agents.

The Agent editor contains the following tabs:

- **General** Lets you specify the priority of the content that an agent is to deliver and how to generate the delivery content (that is, what user to run the query as).
- **Schedule** Lets you specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.
- Condition Lets you specify whether an agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.
- **Delivery Content** Lets you specify the content to deliver with an agent, such as a dashboard page or a saved analysis.
- **Recipients** Lets you specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.
- **Destinations** Lets you specify where the content is to be delivered.
- **Actions** Lets you specify one or more actions to execute when an agent finishes.

You access the Agent editor when you create or edit an agent. See "Creating Agents".

# **About Controlling Access to Agents**

Access to agents is available to all Oracle BI Enterprise Edition users. Granting access to specific agent functions is performed from the "Administration: Manage Privileges page". If you have the appropriate authority, then you can grant or deny explicit access to a variety of agent privileges, including the ability to perform the following actions:

- Create agents
- Publish agents for subscription
- Deliver agents to specified or dynamically determined users
- Chain agents
- Modify current subscriptions for agents

For more information about privileges, see the Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

### How Will iBots Created in Previous Releases Be Upgraded?

Note the following issues about iBots that you upgrade from a previous release:

- In previous releases, you were able to create iBots (now known as agents) that were set to start immediately. If you upgrade iBots with this setting, then they will not have their schedule settings imported to the current release. All other agents will have their schedule settings imported.
  - When you upgrade iBots that were set to start immediately, their Frequency setting on the Schedule tab of the Agent editor will be Never. The actual start time from the "Start Immediately" schedule is guaranteed to be in the past, so is no longer valid.
- In previous releases, you were able to create iBots that delivered the content to you as the owner of the iBot if you had selected the **Me** option. If you upgrade an iBot

in which the **Me** option is selected, then the owner of the agent in the current release is one of the following:

- A subscriber, if the agent is published.
- A recipient, if the agent is not published.
- In previous releases, you were able to create iBots that were conditionally triggered based on the results of requests (now known as analyses).

In this release, to create agents that are conditionally triggered, you use conditions. You can use an inline condition, that is, one that you define at the point of use and do not save to the catalog, or you can use a named condition, that is, one that you have saved by name in the Oracle BI Presentation Catalog. For more information on conditions, see Chapter 9, "Working with Conditions."

An iBot conditionally triggered in a previous release will be upgraded to use an inline condition with the default name of AgentCondition1. This inline condition will evaluate whether the number of rows returned by the selected request is greater than 0. (Note that you can still edit these conditions from within the agent, see the location of the analysis that it is based on, and save it elsewhere in the catalog.)

# **About Using Customization in Agents**

Using customization in agents allows you to create generic agents that you can use for more than one circumstance. This helps you to reduce the number of agents and conditions that you need to create for your organization. It also lets you provide the specific alert required for a particular circumstance.

Customization in an agent is accomplished by overriding the operators and values of prompted filters associated with analyses that are used in the agent. (A prompted filter is a filter whose operator is set to Is Prompted. For more information on prompted filters, see "Creating or Editing Column Filters".)

You use analyses in an agent when you specify that the agent is to:

- Conditionally deliver its content and execute its actions using a condition (either named or inline) that is based on an analysis. For more information on conditions, see Chapter 9, "Working with Conditions."
- Deliver an analysis as its content.

Prompted filters can be customized at various points, depending on how the analysis with which it is associated is used:

- If the analysis is used as the basis for a named condition, then the chain for customization is as follows:
  - **1.** In the analysis
  - In the named condition
  - In the agent customization of the condition
  - In the subscription customization of the agent condition
- If the analysis is used as the basis for an inline condition created in an agent, then the chain of customization is as follows:
  - **1.** In the analysis
  - **2.** In the agent customization of the condition

- **3.** In the subscription customization of the agent condition
- If the analysis is specified as the delivery content for an agent, then the chain for customization is as follows:
  - **1.** In the analysis
  - In the agent customization of the delivery content
  - In the subscription customization of the delivery content

When using customization in an agent, keep the following points in mind:

- Once a filter is overridden, it cannot be overridden again further in the customization chain. For example, if you override a filter in the agent customization of the delivery content, then the subscriber cannot override it later in the subscription customization of the delivery content.
- If any filters in an analysis are combined (that is, constructed using AND and OR), then this AND and OR structure will not be displayed in the customization.
- If the same filters are used more than once in an agent, then only a unique set of the filters will be displayed for customization. The customized values that you specify are applied to all instances of the repeated filter.
  - **Exception:** If the analysis is the result of combining two or more analyses based on a union operation, then unique filters from each part of the union will be displayed for customization. For more information on combining analyses, see "Combining Columns Using Set Operations".
- Filters passed between agents participating in a chain (see the Invoke Agent action in "Actions that Invoke Operations, Functions or Processes in External Systems") do not support customization. The filters passed from the parent agent are those without subscriber customizations. The filters passed to the child agent replace the respective prompted filters before subscriber customizations are applied.

# **Creating Agents**

Use the following procedure to create an agent.

#### To create an agent:

- In the global header, click **New** and select **Agent**. The "Agent editor" is displayed.
- In the "Agent editor: General tab", specify the priority of the content that the agent is to deliver and how to generate the delivery content (that is, what user to run the query as).
- 3. In the "Agent editor: Schedule tab", specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.
- **4.** In the "Agent editor: Condition tab", specify whether the agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.
  - For more information on conditions, see Chapter 9, "Working with Conditions."
- 5. In the "Agent editor: Delivery Content tab", specify the content to deliver with the agent, such as a dashboard page or a saved analysis.
- 6. In the "Agent editor: Recipients tab", specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

- 7. In the "Agent editor: Destinations tab", specify where the content is to be
- **8.** In the "Agent editor: Actions tab", specify one or more actions to execute when the agent finishes.
- **9.** Save the agent. See "Saving Agents".

After you have saved the agent, you can run the agent by clicking the Run Agent **Now** toolbar button. This is helpful, for example, if you want to test the agent.

#### **Notes**

- You can also display the Agent editor by selecting **Agent** from the **Create...** area of the "Home page".
- You can also create an agent from an analysis. For how, see "Creating Agents from Analyses".

# Viewing Summaries of Agent Settings

You can view a summary of the current settings for an agent. A summary is displayed in the "Agent editor" and can be expanded or collapsed. By default, the summary is expanded.

#### To expand or collapse a summary of an agent's settings:

- To the left of the **Overview** heading in the Agent editor, click the:
  - **Plus** button to expand the summary.
  - **Minus** button to collapse the summary.

#### Notes

You can also view a summary of an agent's settings in the "Preview pane" of the "Catalog page".

# Saving Agents

You can save agents in existing folders or in new folders that you create as follows.

- If an agent is available for subscription, then you must save it in a subfolder in /Shared Folders, for example, /Shared Folders/Shared Agents/Sales/Agent1. (Note that you cannot save an agent directly in /Shared Folders, for example, /Shared Folders/Agent1.)
- If an agent is not available for subscription, then you can save it in a subfolder in /Shared Folders, in /My Folders, or in a subfolder in /My Folders, for example, /My Folders/Sales/Agent1. (Note that you cannot save an agent directly in /Shared Folders, for example, /Shared Folders/Agent1.)

For more information about subscribing to agents, see "Subscribing to Agents".

#### To save an agent:

- 1. In the "Agent editor" toolbar, click one of the following buttons:
  - To save a new agent or to save an existing agent with the same name in the same folder, click the **Save this Agent** button.
  - To save an existing agent with another name or in another folder, click the Save this Agent as button.

**2.** Complete the "Save Agent dialog", if displayed, and click **OK**.

# Subscribing to Agents

You can subscribe to agents that the owner has made available to you for subscription.

#### To subscribe to an agent:

- In the global header, click **Catalog** and navigate to the agent to which you want to subscribe.
- Click the **More** link for the agent and select **Subscribe**.

To make an agent available for subscription, in the "Agent editor: Recipients tab", the **Publish Agent for Subscription** option must be selected, and users, and catalog groups and application roles that are allowed to subscribe must be identified.

# Displaying a List of the Agents That You Subscribe to or That You Own

You can display a list of the agents that you subscribe to or that you own, that is, those that you have saved in your personal folder (My Folders).

#### To display a list of the agents that you subscribe to or that you own:

- In the global header, click **Home**. The "Home page" is displayed.
- In the **Browse/Manage...** area:
  - To show a list of the agents that you currently subscribe to, click the My Agent **Subscriptions** folder/binocular button.
    - The "Catalog page" is displayed with a list of the agents to which you are currently subscribed. (Note that agents that you have been designated a recipient of are not included in this list.) You can then perform various tasks, such as customizing your subscription, unsubscribing from the agent, or printing a summary of the agent settings.
  - To show a list of the agents that you own, click the My Agents folder/binocular button.
    - The "Catalog page" is displayed with a list of the agents saved in your personal folder (My Folders). You can then perform various tasks, such as running the agent or editing the agent.

## **Unsubscribing from Agents**

You can unsubscribe from agents to which you are currently subscribed.

#### To unsubscribe from an agent:

- In the global header, click **Home**. The "Home page" is displayed.
- In the **Browse/Manage...** area, click the **My Agent Subscriptions** folder/binocular button.
  - A list of the agents to which you are currently subscribed is displayed. (Note that agents that you have been designated a recipient of are not included in this list.)
- **3.** Navigate to the agent from which you want to unsubscribe.
- **4.** Click the **More** link for the agent and select **Unsubscribe**.

# **Customizing Your Agent Subscriptions**

Suppose an agent has been set up to allow users to customize the subscription and the agent uses an analysis that includes a prompted filter for either its condition, the delivery content, or both. You can customize the filter values for the conditional analysis, the delivery content analysis, or both to suit your needs.

To allow users to customize an agent subscription, you must select the **Allow** Subscribers to Customize Agents option in the "Agent editor: Recipients tab".

#### To customize an agent subscription:

- In the global header, click **Home**. The "Home page" is displayed.
- In the Browse/Manage. . . area, click the My Agent Subscriptions folder/binocular button.

A list of the agents to which you are currently subscribed is displayed. (Note that agents that you have been designated a recipient of are not included in this list.)

- **3.** Navigate to the agent whose subscription you want to customize.
- **4.** Click the **More** link for the agent and select **Customize Subscription**.

The "Customize Subscription to Agent dialog" is displayed.

5. Customize the prompted filters or the parameters as needed. (Depending on how the agent has been set up, you can customize the prompted filters or the parameters for the condition, the delivery content, or both.)

To customize a prompted filter or parameter:

- **a.** Click the **Modify the operator/value for this parameter** button.
  - The "Edit Parameter Filter dialog" is displayed.
- Edit the values as needed.
- c. Click OK.
- Click **OK** in the Customize Subscription to Agent dialog.

**Note:** The customized filter values that you set in the previous steps are not automatically displayed in agent results. To display the customized values, see "Displaying Customized Filter Values in Agent Results".

### Displaying Customized Filter Values in Agent Results

If you have customized filter values in an agent subscription and want to display the filter values in the agent results, then you must add a Filters view to the analysis.

#### To display customized filter values in agent results:

- Edit the analysis that is being customized.
- Display the "Analysis editor: Results tab".
- Add the Filters view to the analysis. For how, see "Adding Views to the Results of Analyses"

# Disabling and Enabling Agents' Schedules

You can temporarily disable (and then enable) an agent's schedule. Disabling an agent's schedule stops the agent from running on its defined schedule. It does not stop it from being run by other means, for example, by the Run Agent Now toolbar button in the "Agent editor".

Disabling an agent's schedule is useful if you have defined a schedule for an agent but find you want to stop it for a certain period of time.

In addition, an agent's schedule may be temporarily disabled by default. For example, if you copy a folder that contains one or more agents, then the schedule of each agent copy is disabled by default, and the agent will not run on its defined schedule until you enable it.

#### To disable and then enable an agent's schedule:

- 1. In the global header, click **Catalog** and navigate to the agent whose schedule you want to disable or enable.
- **2.** Click the **More** link for the agent and select one of the following options:
  - **Disable Schedule** to disable the agent's schedule
  - **Enable Schedule** to cause the agent to run on schedule again

You also can disable and enable an agent's schedule by using the Enabled box in the "Agent editor: Schedule tab".

# What Are Devices and Delivery Profiles?

Devices and delivery profiles control how you will be reached when an alert is generated by an agent and which devices will receive the content:

- **Device** A device is the medium used to deliver content to you. The content of an agent can be delivered to a range of devices as an e-mail or SMS message.
- **Delivery profile** A delivery profile specifies which devices to use to deliver content to you, based on the priority of the content. You can define several delivery profiles to meet your needs, and switch among them. However, only one profile can be active at any given time.

For example, you might have an **In the Office** delivery profile that delivers content to an office e-mail, and an **On the Road** profile that delivers content to your cell phone, depending on the priority of the information.

You configure your devices and your delivery profiles from the "My Account dialog: Delivery Options tab". For more information, see "Configuring Your Devices and Delivery Profiles". (The administrator manages the types of devices that are available to you. For more information on managing device types, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.)

**Note:** Your organization might automatically generate system delivery devices and delivery profiles as follows:

- Using the SA System subject area, your organization can generate system delivery devices based on each user's e-mail address and other device information (such as cell phone numbers) from the SA System subject area, and then generate a system delivery profile for each user using the user's system delivery devices.
- Using the LDAP server (but only if delivery devices and profiles have not been generated from the SA System subject area), your organization can generate system delivery devices based on each user's email address from the LDAP server and then generate a system delivery profile for each user using the user's system delivery device.

If you do not configure any devices or profiles, then the system delivery profile that is generated for you is used as the default. (Note that, even if you define other profiles, you can configure the system profile as your default profile.) If you define a delivery profile, then you can include system devices in this profile and set the priority levels for which this delivery device is used.

See Appendix B, "Setting Up the SA System Subject Area" in the *Oracle* Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

Depending on the destinations that are specified for an agent, content can be delivered to the:

- Home page and dashboard.
- Active delivery profile or specific devices.

When the destinations are specific devices, content is delivered to the devices that you have configured rather than to the devices in your active delivery profile. For example, if an Agent is defined to be delivered to Email devices, then the default Email device that you configured will be used rather than any Email devices that you configured in your active delivery profile.

Delivery content is assigned a specific priority. The default priority is normal. When you select devices for your active profile, you can indicate what priority content should be sent to that device. For example, if you have added a cell phone to your delivery profile, then you might associate it with high priority content only. When you know that you will be away from the office frequently and out of e-mail range, you can select to receive only low priority content through your office e-mail.

### **Configuring Your Devices and Delivery Profiles**

You use the "My Account dialog: Delivery Options tab" to configure the devices and delivery profiles to be used to reach you when an alert is generated by an agent. For more information about devices and delivery profiles, see "What Are Devices and Delivery Profiles?"

To configure your devices and delivery profiles:

- 1. In the global header, click **Signed In As** *username*, (where *username* is the name that you use to log in to Oracle BI Enterprise Edition) and then select My Account to display the "My Account dialog".
- **2.** Click the Delivery Options tab.
- **3.** In the Devices area, add or edit the devices that you want.

To add a device, perform the following steps:

- **a.** Select the device category button (for example, **Email**) for the device that you want to add.
- **b.** Click the **Create Device** button to display the "Create Device dialog".
- **c.** In the **Name** field, enter the name of the device, for example, Work E-mail.
- **d.** In the **Category** box, select the device category.
- In the **Device Type** box, select the type of device.
- In the Address/Number field, enter the address for the device, for example, an e-mail address for e-mail.
- **g.** Click **OK** to return to the My Account dialog: Deliver Options tab.
  - The device is displayed in the Devices list for the appropriate category (for example, **Email**).
- h. If you want this device to be the default device, then select the **Default** option to the right of the device name.

To edit a device, perform the following steps:

- **a.** Select the device in the list.
- **b.** Click the **Edit Device** button to display the "Edit Device dialog".
- **c.** Make your edits and click **OK** to return to the My Account dialog: Deliver Options tab.
- **4.** Add or edit the delivery profiles that you want.

To add a delivery profile, perform the following steps:

- **a.** Click the **Create Delivery Profile** button to display the "Create Delivery Profile dialog".
- **b.** In the **Name** field, enter a delivery profile name.
- **c.** To the right of each delivery device that you want to use when this profile is the active profile, select one or more of the priority options — **High**, **Normal**, or **Low**. These priorities are used together with the priority of the delivery content to determine the destination for delivery content. For more information on the priority of the delivery content, see "Agent editor: General tab".
- **d.** Click **OK** to return to the My Account dialog: Deliver Options tab.
  - The profile is displayed in the Delivery Profiles list.
- **e.** If you want the delivery profile to be your active profile, then select the **Active** option to the right of the profile name.

To edit a delivery profile, perform the following steps:

- Select the delivery profile in the list.
- **b.** Click the **Edit Profile** button to display the "Edit Delivery Profile dialog".

- **c.** Make your edits and click **OK** to return to the My Account dialog: Deliver Options tab.
- **5.** Click **OK**.

# **Accessing and Managing Your Alerts**

You can access a list of your alerts. The list shows the name of each alert as well as its delivery date and time, and number of occurrences.

Using this list, you can:

- View the content for an alert.
- Clear an alert and all its occurrences.
- Edit the agent that generated the alert, if you have permission to modify the agent.
- Run the agent that generated the alert, if you have permission to execute the agent.
- Subscribe to the Oracle BI Alerts feed. See "Subscribing to an RSS Feed for Alerts".
- Clear all your alerts and all their occurrences.

For more information about alerts, see "What Are Alerts?"

#### To access and manage your alerts:

- In the global header, click Alerts!. The "Alerts dialog" is displayed.
- View and manage your alerts as needed.

You can also access and manage your alerts from the Alerts section on the "Home page".

## Subscribing to an RSS Feed for Alerts

You can receive alerts by way of an RSS 2.0 compatible reader that supports HTTP basic authentication. However, if Oracle BI Presentation Services uses the HTTPS protocol, then the RSS reader that you use must also support the HTTPS protocol.

To subscribe to an RSS Feed for alerts, you must have been granted the Access to RSS Feeds privilege by the administrator.

#### To subscribe to an RSS feed for alerts:

- Click the **Alerts!** link to display the "Alerts dialog".
- Click the **Subscribe to RSS feed** button (located to the left of the **Clear All** button).
  - The browser's page to subscribe to an RSS feed is displayed.
- Subscribe to the Oracle BI Alerts following the instructions on the browser's page.

| Subscribing to an RSS | S Feed for Alerts |
|-----------------------|-------------------|
|-----------------------|-------------------|

# **Working with Conditions**

This chapter describes conditions and explains how you work with them. It contains the following topics:

- "What Are Conditions?"
- "For What Do I Use Conditions?"
- "What Are the Elements of a Condition?"
- "What Are Named Conditions?"
- "What Are Inline Conditions?"
- "Who Creates Conditions?"
- "Creating Named Conditions"
- "Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions"
- "Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages"
- "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages"
- "Specifying the Settings for Conditions"
- "Editing Named Conditions"
- "Editing, Customizing, Testing, Saving, and Disabling Conditions Used in Agents"
- "Editing, Testing, Saving, and Removing Conditions Used in Action Links in Dashboard Pages"
- "Editing, Testing, Saving, and Removing Conditions Used in Sections in Dashboard Pages"

### What Are Conditions?

Conditions are objects that return a single Boolean value based on the evaluation of an analysis or of a Key Performance Indicator (KPI).

What a condition evaluates depends on whether it is based on an analysis or on a KPI, as follows:

- For an analysis, it evaluates the row count of the analysis.
- For a KPI, it evaluates the status of the KPI.

For example, a condition might evaluate whether the results of an analysis return a number of rows greater than 0:

- If the analysis returns at least one row, then the condition evaluates to true.
- If the analysis does not return any rows, then the condition evaluates to false.

### For What Do I Use Conditions?

You use conditions to determine whether:

- Agents deliver their content and execute their actions
- Actions links (which when clicked run actions) are displayed in dashboard pages
- Sections and their content are displayed in dashboard pages

For example, a sales manager wants to deliver a Monthly Sales Report to his direct reports only when sales drop below \$2 million. You might create a condition that is based on an analysis that shows sales that are below \$2 million and add it to an agent whose delivery content is the Monthly Sales Report. When the condition evaluates to true (that is, the analysis contains rows where sales are below \$2 million), the agent will be triggered to deliver the Monthly Sales Report.

You can also use a different kind of condition to determine whether action links are enabled in analyses. For information, see "About Conditionally Enabling Actions Added to Analyses".

### What Are the Elements of a Condition?

A condition consists of the following elements:

- An analysis or KPI.
- The criteria to use when evaluating the condition:
  - For an analysis, the criteria is a row count and an operator to apply to the row count; for example, the row count is equal to 100.
  - For a KPI, the criteria is a KPI status, for example, the KPI status is OK.
- Values for any prompted filters that are associated with the analysis or values for KPI dimensions that were set to **Set in watchlist** in the KPI.

### What Are Named Conditions?

A named condition is a condition that you define and then save by name in the Oracle BI Presentation Catalog so that you can reuse it in agents and dashboard pages.

You create a named condition when you create a new condition from the:

- New menu in the global header by selecting Condition under Analysis and **Interactive Reporting**
- Home page by clicking the More link under Analysis and Interactive Reporting in the Create area and selecting **Condition**

You also create a named condition from the "Agent editor: Condition tab" when you save an inline condition to the catalog. For information on inline conditions, see "What Are Inline Conditions?"

### What Are Inline Conditions?

An inline condition is a condition that you define at the point of use and do not save by name in the catalog. Instead it is saved as part of the dashboard page or agent.

An inline condition is automatically deleted when the dashboard page or agent that contains it is deleted. This simplifies catalog management for conditions that make sense only within particular Oracle BI content.

You can create an inline condition when you:

Create or edit an agent and specify (in the "Agent editor: Condition tab") that the agent is to deliver its content and run associated actions conditionally. See "Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions".

For information on creating agents, see "Creating Agents".

Add an action link to a dashboard page and specify that the action link is to be displayed conditionally. See "Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages".

For information about adding action links to dashboard pages, see "About Adding Actions to Dashboard Pages".

Add a section to a dashboard page and specify that the section is to be displayed conditionally. See "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages".

For information about adding sections to dashboard pages, see "Adding Content to Dashboards".

### Who Creates Conditions?

Generally:

Administrators create the named conditions for an organization, which are then used by content designers (providing they have the appropriate permissions to the conditions or the folders in which the conditions are saved) as they create dashboards and agents.

The ability to create or edit named conditions is controlled by the Create Conditions privilege, which is managed by the administrator.

Content designers create inline conditions.

For information about privileges, see the Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For information about permissions, see Chapter 13, "Managing Objects in the Oracle BI Presentation Catalog."

### **Creating Named Conditions**

You can create named conditions that you can reuse in agents and dashboard pages. See "What Are Named Conditions?"

#### To create a named condition:

In the global header, click **New** and then select **Condition**.

The "New Condition dialog" is displayed.

2. Complete the New Condition dialog. For more information, see "Specifying the Settings for Conditions".

### Using Conditions to Determine Whether Agents Deliver Their Content or **Execute Their Actions**

You can use conditions to determine whether agents deliver their content or execute their actions. For information on agents, see Chapter 8, "Delivering Content."

To use a condition to determine whether an agent delivers its content or executes its actions:

- Edit the agent.
- Click the "Agent editor: Condition tab".
- **3.** Select the **Use a condition** box.
- **4.** If you want to:
  - **a.** Create a new condition, click **Create** to display the "Create Condition dialog" and then complete the dialog.
    - For information on completing the dialog, see "Specifying the Settings for Conditions".
  - **b.** Select an existing condition, click **Browse** to display the "Select Condition dialog" and then complete the dialog.
  - **c.** Save the agent.

# Using Conditions to Determine Whether Action Links Are Displayed in **Dashboard Pages**

You can use conditions to determine whether action links are displayed in dashboard pages. For information on adding actions links to dashboard pages, see "About Adding Actions to Dashboard Pages".

To use a condition to determine whether an action link is displayed in a dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- Click the tab of the page that contains the action link that you want to display conditionally.
- 3. Hover over the action link object in the Page Layout area to display the action link object's toolbar and click the **Properties** button, or, if the action link is in an action link menu:
  - **a.** Hover over the action link menu object in the Page Layout area to display the action link menu object's toolbar and click the **Properties** button.
    - The "Action Link Menu Properties dialog" is displayed.
  - **b.** Select the action link that you want to conditionalize and click the **Edit** button.

The "Action Link Properties dialog" is displayed.

- **4.** In the **Show** component, click the **Conditionally** box.
  - The **Condition** component is displayed.
- **5.** If you want to:

- a. Create a new condition, click the **New Condition** button to display the "New Condition dialog" and then complete the dialog.
  - For information on completing the dialog, see "Specifying the Settings for Conditions".
- Select an existing condition, click the **Select Condition** button to display the "Select Condition dialog" and then complete the dialog.
- Click **OK** in the Action Link Properties dialog.
- 7. If the action link is in an action link menu, then click **OK** in the Action Link Menu Properties dialog.
- **8.** Save the dashboard.

# Using Conditions to Determine Whether Sections Are Displayed in **Dashboard Pages**

You can use conditions to determine whether sections are displayed in dashboard pages. For information on adding sections to dashboards, see "Adding Content to Dashboards".

#### To use a condition to determine whether a section is displayed in a dashboard page:

- Edit the dashboard. For information, see "Editing Dashboards".
- **2.** Click the tab of the page that contains the section that you want to display conditionally.
- 3. Hover over the section in the Page Layout area to display the section's toolbar, click the **Properties** button for the section, and select **Condition**. The "Section Condition dialog" is displayed.
- **4.** If you want to:
  - a. Create a new condition, click the **New Condition** button to display the "Create Condition dialog" and then complete the dialog.
    - For information on completing the dialog, see "Specifying the Settings for Conditions".
  - Select an existing condition, click the **Select Condition** button to display the "Select Condition dialog" and then complete the dialog.
- 5. Click **OK** in the Section Condition dialog.
- **6.** Save the dashboard.

### **Specifying the Settings for Conditions**

You need to specify the settings for a condition in either the New Condition, Create Condition, or Edit Condition dialog, when you create or edit a condition as described in the following sections:

- "Creating Named Conditions"
- "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages"
- "Using Conditions to Determine Whether Agents Deliver Their Content or Execute Their Actions"

- "Using Conditions to Determine Whether Action Links Are Displayed in Dashboard Pages"
- "Editing Named Conditions"
- "Editing, Customizing, Testing, Saving, and Disabling Conditions Used in Agents"
- "Editing, Testing, Saving, and Removing Conditions Used in Action Links in Dashboard Pages"
- "Editing, Testing, Saving, and Removing Conditions Used in Sections in Dashboard Pages"

To specify the settings for a condition in the New Condition dialog, Create Condition dialog, or Edit Condition dialog:

- 1. In the Create condition based on box, select whether the condition is to be based on an Analysis or KPI.
- 2. For:
  - (optional) An analysis, edit any prompted filters, as desired.
  - A KPI, specify the values for any KPI dimensions.

**Note:** If you specify values for any prompted filters, then these values cannot be overridden at the point of use.

- **3.** Specify the evaluation criteria as follows:
  - For an analysis, in the **Condition true if number or rows** area:
    - In the *Operator* box, select the operator to apply to the row count.
    - In the *Row Count* box or boxes, specify the row count to be evaluated.
  - For a KPI, in the **Condition true if KPI** box, select the KPI status.
- (optional) Click **Test Condition** to test the condition.
- **5.** If you want to save the condition as:
  - An inline condition, click **OK**.
  - A named condition, click Save As to display the "Save As dialog", where you can save the condition by name to the catalog.

## **Editing Named Conditions**

To edit a named condition:

- 1. Navigate to the condition in the catalog.
- 2. Click the Edit link to display the "Edit Condition dialog".
- **3.** Make the desired changes.

For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions".

# Editing, Customizing, Testing, Saving, and Disabling Conditions Used in **Agents**

#### You can:

- Edit inline conditions
- Customize named conditions by editing prompted filters
- Test conditions to see whether the conditions evaluate to true or false
- Save inline conditions to the catalog as named conditions
- Remove conditions

#### To edit, customize, test, save, or remove a condition used in an agent:

- Edit the agent.
- Click the "Agent editor: Condition tab".
- 3. To:
  - Edit an inline condition, click **Edit Condition** to display the "Edit Condition dialog", and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions".
  - To customize the prompted filters of a named condition, click **Customize** to display the "Customize Condition dialog", and make the desired customizations.
  - To test a condition, click **Test**. The evaluation results are displayed.
  - To save an inline condition to the catalog as a named condition, click Save To Catalog to display the "Save As dialog".
  - To disable a condition, click **Do not use a condition (always deliver content** and run actions).
- **4.** Save the agent.

# Editing, Testing, Saving, and Removing Conditions Used in Action Links in Dashboard Pages

You can perform the following tasks on conditions that are used in action links in dashboard pages:

- Edit conditions
- Test conditions to see whether the conditions evaluate to true or false
- Save inline conditions to the catalog as named conditions and save named conditions to the catalog by other names
- Remove conditions

#### To edit, test, save, or remove a condition used in an action link in a dashboard page:

- Edit the dashboard page that contains the action link.
- Hover over the action link object in the Page Layout area to display the action link object's toolbar and click the **Properties** button, or, if the action link is in an action link menu:
  - Hover over the action link menu object in the Page Layout area to display the action link menu object's toolbar and click the **Properties** button.

The "Action Link Menu Properties dialog" is displayed.

**b.** Select the action link that contains the condition and click the **Edit** button.

The "Action Link Properties dialog" is displayed.

- Click the **More** button to the right of the **Condition** field and then:
  - To edit a condition, select **Edit Condition** to display the "Edit Condition dialog" and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions".
  - To test a condition, select **Test Condition**. The evaluation results are displayed.
  - To save an inline condition to the catalog as a named condition, select **Save Condition As** to display the "Save As dialog".
  - To remove a condition, select **Remove Condition**.
- **4.** Click **OK** in the Action Link Properties dialog.
- 5. If the action link is in an action link menu, then click **OK** in the Action Link Menu Properties dialog.
- **6.** Save the dashboard.

# Editing, Testing, Saving, and Removing Conditions Used in Sections in **Dashboard Pages**

You can perform the following tasks on conditions that are used in sections in dashboard pages:

- Edit conditions
- Test conditions to see whether the conditions evaluate to true or false
- Save inline conditions to the catalog as named conditions and save named conditions to the catalog by other names
- Remove conditions

#### To edit, test, save, or remove a condition used in a section in a dashboard page:

- **1.** Edit the dashboard page that contains the section.
- Hover over the section in the Page Layout area to display the section's toolbar, click the **Properties** button for the section, and select **Condition**. The "Section Condition dialog" is displayed.
- **3.** Click the **More** button to the right of the **Condition** field and then:
  - To edit a condition, select **Edit Condition** to display the "Edit Condition dialog" and make the desired changes. For more information on completing the Edit Condition dialog, see "Specifying the Settings for Conditions".
  - To test a condition, select **Test Condition**. The evaluation results are displayed.
  - To save an inline condition to the catalog as a named condition, select **Save Condition As** to display the "Save As dialog".
  - To remove a condition, select **Remove Condition**.
- **4.** Save the dashboard.

# **Working with Actions**

This chapter describes actions and explains how you work with them. It contains the following topics:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "What Action Types Are Available?"
- "Who Can Create Actions?"
- "Where Can I Add Actions?"
- "What Are Named Actions?"
- "What Are Inline Actions?"
- "How Will Actions Created in Previous Releases Be Upgraded?"
- "What Are Action Parameters?"
- "About Conditionally Enabling Actions"
- "About Customizing Information Displayed to Users on Action Execution"
- "Creating Named Actions"
- "Specifying the Settings for New Actions"
- "Adding Actions to Analyses"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Dashboard Pages Using Action Links"
- "Adding Actions to Dashboard Pages Using Action Link Menus"
- "Adding Actions to Agents"
- "Adding Actions to KPIs"
- "Adding Actions to Initiatives and Objectives in Scorecards"
- "Creating a New Action Based on an Existing Named Action"
- "Editing Named Actions"
- "Editing Actions and Action Links Added to Analyses"
- "Editing Actions, Action Links, and Action Link Menus Added to Dashboard
- "Editing Actions Added to Agents"
- "Editing Actions and Action Links Added to KPIs"

- "Editing Actions and Actions Links Added to Initiatives and Objectives in Scorecards"
- "Saving Inline Actions in Analyses to the Catalog"
- "Saving Inline Actions in Dashboards to the Catalog"
- "Executing a Named Action to Test It"

#### What Are Actions?

Actions provide functionality to:

- Navigate to related content
- Invoke operations, functions, or processes in external systems

You can include actions in analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs.

Actions can be executed:

- Explicitly by end users who click action links that are embedded within:
  - Analyses on column headings, column values, and hierarchy level values as well as in certain views, such as graphs
  - Dashboard pages
  - Content delivered by agents
  - Scorecards in Cause & Effect Maps, Custom Views, Strategy Tree Views, Strategy Maps, KPIs, and KPI watchlists.
  - KPI analyses
- Automatically, as the final step of an agent
- Directly from the "Home page" or from the "Catalog page"

For example, a sales director wants to meet with the sales manager of any region where sales drop below a certain threshold. You might embed an action object into the sales director's dashboard to enable the sales managers to schedule such a meeting simply by clicking a link. Or, you could use an agent to schedule the meeting automatically as soon as the sales threshold is passed.

# What Are Action Links and Action Link Menus?

An action link is a link to an action that you have embedded in an analysis, dashboard page, scorecard objective, scorecard initiative, or KPI that, when clicked, runs an associated action.

Figure 10-1 shows an analysis to which an action link has been added to column values. When you hover the mouse pointer over a column value (for example, Central Region in this figure), the column value is displayed as a link. Clicking the link executes the associated action.

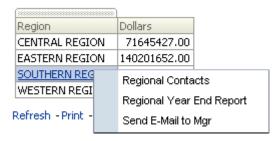
Figure 10–1 Example of an Action Link Added to an Analysis

| Region          | Dollars      |
|-----------------|--------------|
| CENTRAL REGION  | 71645427.00  |
| EASTERN REGION  | 140201652.00 |
| SOUTHERN REGION | 73861217.00  |
| WESTERN REGION  | 102775415.00 |

Refresh - Print - Export - Add to Briefing Book - Copy

In analyses, KPIs, scorecard objectives, and scorecard initiatives, multiple action links are displayed in a list. Figure 10–2 shows an analysis to which a list of action links (Regional Contacts, Regional Year End Report, and Send E-Mail to Mgr) has been added to column values. When you hover the mouse over a column value (for example, Southern Region in this figure), the list is displayed. Clicking a link in the list executes the associated action.

Figure 10-2 Example of Multiple Action Links Added to an Analysis



On a dashboard page, you can add action links as standalone links or you can group multiple action links together on action link menus. An action link menu lets users select, from a list of action links, the appropriate action to be executed based on the business insight that they gained from the data.

Additionally, you can conditionally show each action link, depending on the data. This powerful functionality enables you to set up context-sensitive menus that present users with the appropriate next steps based on the data that is displayed. For more information on conditionally showing action links, see "About Conditionally Enabling Actions".

Action links that you add to analyses are displayed to users in the following views:

- **Tables**
- Pivot tables
- Graphs
- Funnel graphs
- Gauges
- Map views

For information about views, see Chapter 3, "Adding Views for Display in Dashboards."

Action links that you add to scorecard objectives and initiatives are displayed to users in the following scorecard views:

- Cause & effect maps
- Custom views
- Strategy trees
- Strategy maps
- **KPI** watchlists

Action links that you add to KPIs are displayed to users in KPI analyses.

# What Action Types Are Available?

The types of actions that are available are categorized into two groups: those that navigate to related content and those that *invoke* operations, functions, or processes in external systems.

Privileges control which types of actions you can create. You might be able to create only navigate-type actions, only invoke-type actions, or both navigate- and invoke-type actions. Or, you might be able to only execute actions (if they exist as shared objects in the catalog or in a shared object, for example in a dashboard or analysis). For more information, see "Who Can Create Actions?"

In addition, where you can an add an action depends on its type. For information, see "Where Can I Add Actions?"

### Actions that Navigate to Related Content

The following list identifies and describes the types of actions that navigate to related content:

- **Navigate to BI Content** Navigates to an analysis, a specific dashboard page, or dashboard.
- **Navigate to a Web Page** Navigates to a specified URL.
- **Navigate to EPM Content** Navigates to Financial Reporting content.

This action type requires some configuration before it is available. For information on the required configuration, see Oracle Fusion Middleware Integrator's Guide for *Oracle Business Intelligence Enterprise Edition.* 

**Navigate to E-Business Suite** — Navigates to an Oracle E-Business Suite page or form. You use this type of action to allow users to navigate back to an Oracle E-Business Suite page or form after they have first logged in to Oracle E-Business Suite and then accessed Oracle BI EE.

This action type requires some configuration before it is available. For information on the required configuration, see Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition.

### Actions that Invoke Operations, Functions or Processes in External Systems

The following list identifies and describes the types of actions that invoke operations, functions, or processes in external systems:

**Invoke a Web Service** — Invokes a Web Service operation or any SOA service that is exposed as a Web Service (for example, a Business Process Execution Language (BPEL) process in the Oracle SOA Suite that is exposed as a Web Service).

This action type requires some configuration before you can use it. For information on the required configuration, see Oracle Fusion Middleware Integrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

Invoke a Java Method — Invokes a Java method in an Enterprise Java Bean (EJB).

This action type requires some configuration before you can use it. For information on the required configuration, see Oracle Fusion Middleware Integrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

Invoke a Browser Script — Invokes a JavaScript function from the client Web browser.

This action type requires some configuration before you can use it. For information on the required configuration, see Oracle Fusion Middleware Integrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

You can use this action type to invoke the USERSCRIPT.ADFAction function, which lets you add an action to an Application Development Framework (ADF) page that represents an ADF process or operation.

For more information, see Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition.

**Invoke Server Script** — Executes a custom script when the current agent completes. The custom script type can be either Javascript or VBScript.

> **Note:** This action supports custom script actions when the server is running on Microsoft Windows. For other platforms (including Windows), consider using the Invoke Java Method (EJB) or Invoke Web Services action.

- **Invoke an HTTP Request** Sends an HTTP request through the server to a target URL. This action type is used to invoke external systems that are exposed by URL APIs.
- **Invoke Agent** Invokes another agent. This action type lets you chain agents. For example, you can have Agent A invoke Agent B, which invokes Agent C and so on.
- **Invoke Java Jobs** Executes a custom Java program action that was created in a previous release and upgraded in this release. You cannot create this type of action. (See "How Will Actions Created in Previous Releases Be Upgraded?") This action type is read-only.

### Who Can Create Actions?

The ability to create actions is controlled by the following action privileges, which are managed by the administrator:

- **Create Navigate Actions** Grants the right to create actions that navigate to related content.
- **Create Invoke Actions** Grants the right to create actions that invoke operations, functions, and processes to external systems.

Save Actions containing embedded HTML — Used in conjunction with the Create Invoke Actions privilege, grants the right to embed HTML code in the customization of the results of a Invoke Web Service action.

By default, these action privileges are granted to the administrator.

For information about privileges, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For information about permissions, see Chapter 13, "Managing Objects in the Oracle BI Presentation Catalog."

### Where Can I Add Actions?

Where you can add an action depends on its type. You can add some types to analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs, while others you can add only to agents or only to analyses, dashboard pages, scorecard objectives, scorecard initiatives, and KPIs. Table 10-1 lists the types of actions and identifies where you can add each type.

Table 10-1 Action Types and Where You Can Add Them

| Action Type                  | Add to Analysis, Dashboard<br>Pages, Scorecard Objectives,<br>Scorecard initiatives, and KPIs | Add to Agents   |
|------------------------------|---|---|
| Navigate to EPM Content      | Yes   | No  |
| Navigate to BI Content       | Yes   | No  |
| Navigate to a Web Page       | Yes   | No  |
| Navigate to E-Business Suite | Yes   | No  |
| Invoke a Web Service         | Yes   | Yes   |
| Invoke a Java Method         | Yes   | Yes   |
| Invoke a Browser Script      | Yes   | No  |
| Invoke an HTTP Request       | Yes   | Yes   |
| Invoke Agent                 | No  | Yes   |
| Invoke Server Script         | No  | Yes   |
|                              |   | <b>Note:</b> For this action type, the server must be running on Microsoft Windows. |
| Invoke Java Jobs             | No  | Yes   |

### What Are Named Actions?

A named action is an action that you define and then save by name in the Oracle BI Presentation Catalog so that you can reuse it. You can also reuse a named action as a template to create another named action.

You can save all types of actions to the catalog except Invoke Agent, Invoke Server Script, and Invoke Java Jobs.

For example, suppose that you frequently want to include navigation to your organization's Web site in analyses and dashboard pages that you are designing. You can create an action that navigates to the URL and save it to the catalog. Then as you create analyses and dashboard pages, you can add this named action to them.

You create a named action when you create a new action from the:

- New menu on the global toolbar by clicking Action and then selecting one of the action types (for example, Navigate to a Web Page).
- Home page by clicking **Action** in the Create area and then selecting one of the action types (for example, Navigate to BI Content).

You can also create a new named action from a dashboard, an analysis, or a KPI. You do so by creating an inline action and then, if you want to keep it, saving it to the catalog. For information on inline actions, see "What Are Inline Actions?"

### What Are Inline Actions?

An inline action is an action that you define at the point of use and do not save by name in the catalog. Instead, it is saved as part of the analysis, dashboard page, agent, scorecard objective, scorecard initiative, or KPI.

An inline action is automatically deleted when the analysis, dashboard page, agent, scorecard objective, scorecard initiative, or KPI that contains it is deleted. This simplifies catalog management for actions that make sense only within particular BI content.

For example, suppose that you are designing a dashboard page and want to invoke an EJB that you will use only once. You can create an action that invokes the EJB at that point and then add it to the page. When you save the dashboard, the action is saved with it.

You create an inline action when you:

- Create or edit an agent and add a new action to run when the agents finishes. For information, see "Adding Actions to Agents".
- Edit a dashboard page and add a new action to the page using an action link or an action link menu.
  - For information see "About Adding Actions to Dashboard Pages".
- Create or edit an analysis and add a new action to a column heading, column value, or hierarchy level value using an action link.
  - For information, see "Adding Actions to Analyses".
- Create or edit a KPI and add a new action to the KPI using an action link. For information, see "Adding Actions to KPIs".
- Create or edit an initiative or objective in a scorecard and add a new action to the initiative or objective using an action link.
  - For information, see "Adding Actions to Initiatives and Objectives in Scorecards".

# How Will Actions Created in Previous Releases Be Upgraded?

In previous releases of Oracle BI Enterprise Edition, you could use the Advanced tab to specify one or more actions to execute when an iBot completed or create action links that allowed end users to navigate from their dashboards to a record in a Siebel operational application.

If you upgrade from a previous release, then these actions will be upgraded as follows:

Custom script actions that were attached to Release 10g iBots on the Advanced tab of the iBot definition will be upgraded to Invoke Server Script actions.

- Custom Java program actions will be upgraded to Invoke Java Jobs actions and will continue to run as before. However, these actions will be read-only. For any new custom code that you want to run on the server, use the Invoke Java Method (EJB) action or the Invoke Web Services action.
- Actions that linked to Siebel operational applications and workflow actions will not be upgraded. To achieve equivalent functionality for an action that invoked a workflow in a previous release, it is recommended that you expose the workflow as a Web service, and then create an Invoke a Web Service action.

### What Are Action Parameters?

Action parameters are used to pass data from Oracle BI EE to the operations or processes that are represented by actions:

- For actions that invoke Web Service operations, the parameters correspond to the simple types defined as attributes and simple elements (or complex elements deconstructed into their simple type components) within the input message of a Web service operation and are read from the Web Service Definition Language (WSDL) that defines the operation and any parameters on that operation.
- For actions that invoke a Java method, browser script, or server script, the parameters correspond to the arguments on the method.
- For actions that navigate to a Web page or invoke an HTTP Request, the parameters correspond to the parameters passed through from the URL.

When creating a named action or when associating an action with an object (such as a column on an analysis), you can specify whether a parameter is:

- **Fixed** A fixed parameter can be seen but its value cannot be set by a user.
- **Hidden** A hidden parameter cannot be seen and its value cannot be set by a user. (Note that hidden does not mean that the parameter is secure.)
- **Optional** An optional parameter does not require a value in order for the action to be executed.

# **About Conditionally Enabling Actions**

You can conditionally enable actions that are added to:

- Analyses. See "About Conditionally Enabling Actions Added to Analyses".
- Dashboard pages. See "About Conditionally Enabling Actions Added to Dashboard Pages".
- Agents. See "About Conditionally Enabling Actions Added to Agents".

Actions that are added to KPIs are associated with KPI ranges so they are enabled conditionally by virtue of their definitions. Likewise for actions that are added to scorcecards, as they are associated with states of initiatives and objectives.

# About Conditionally Enabling Actions Added to Analyses

When you add an action to an analysis, you can specify that its associated action link is to be displayed only when one or more conditions are met. You do this by selecting one or more columns in the analysis to use and specifying the condition to meet. (The steps to specify a condition are very similar to those used for conditional formatting.)

For example, in an analysis that shows sales figures by regions, you can specify that an action link Send E-mail to Regional Manager is to be displayed only if sales figures drop below a certain amount.

### About Conditionally Enabling Actions Added to Dashboard Pages

When you add an action to a dashboard page, you can specify that its associated action link is to be displayed only when a certain condition is satisfied. You do this by specifying a condition (either a named or inline) that is to be satisfied.

For example, in a dashboard page that displays stock levels for products, you can specify that an action link Order Stock is to be displayed only if stock levels are low for a given product.

Using conditional action links on an action link menu lets you display different sets of actions to users, depending on the data in dashboard pages. For example, in a dashboard page that displays stock levels for products, you can add an action link menu that contains the following action links:

- Order Stock and Stop Advertising, if stock levels are zero for a given product
- Order Stock, if stock levels are low for a given product
- No actions, if the stock levels are adequate for a given product

For more information on action links, see "What Are Action Links and Action Link Menus?" For more information on conditions, see Chapter 9, "Working with Conditions."

### About Conditionally Enabling Actions Added to Agents

While you primarily use an agent's condition to determine whether the agent delivers its content or not, you can also use it to determine if the agent executes its actions.

When you add an action to an agent, you can specify that the action is to be executed only when a certain condition is satisfied. You do this by adding a condition (either inline or named) to the agent, and then specifying whether you want the action to be executed:

- Only if the agent condition evaluates to true
- Only if the agent condition evaluates to false

For some actions, you can also specify whether to execute the action for each row that is returned by the condition. (Note that Invoke Server Script actions and Invoke Agent actions cannot be executed per row of the result set. In addition, if one of the action parameters is a result set mapping, then it cannot be executed per row.)

For example, you could add an action to an agent that automatically kicks off a new marketing campaign and specify that it is to be executed only if a condition that evaluates whether sales for a region drop below \$2,000,000 is true.

For more information on conditions, see Chapter 9, "Working with Conditions."

# About Customizing Information Displayed to Users on Action Execution

You can customize information to display to users when they run actions. Specifically, you can:

Specify whether to display a confirmation prompt to users when they execute the action.

- Customize a dialog that is displayed to users when they need to supply action parameter values before the action is executed.
- Customize a invocation successful message that is displayed to users, or, for an Invoke a Web Service action, you can customize a dialog to display information about the results of the action.
- Customize a invocation failure message that is displayed to users.

You use the "Action Options dialog" to customize this information when you create or edit an action. See "Specifying the Settings for New Actions".

# **Creating Named Actions**

You can create named actions (if you have the appropriate privileges), which content designers can add to analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs.

For more information about named actions, see "What Are Named Actions?"

#### To create a named action:

- 1. In the global header, click New, select Action under Actionable Intelligence, and then select the type of action that you want to create.
  - The "Create New Action dialog" is displayed.
- 2. Complete the New Action dialog. For information, see "Specifying the Settings for New Actions".

# **Specifying the Settings for New Actions**

You specify the settings for a new action in the "Create New Action dialog" (displayed as the New Action dialog for agents and dashboards, and Add New Action dialog for scorecards), when you do any of the following tasks:

- "Creating Named Actions"
- "Adding Actions to Analyses"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Agents"
- "Adding Actions to KPIs"
- "Adding Actions to Initiatives and Objectives in Scorecards"

To specify the settings for a new action:

- Click the Create New Action button (displayed as the Add New Action button in an agent or New Action button in a dashboard) and then select the type of action that you want to create. If you selected:
  - Navigate to BI Content, first the "Select BI Content For Action dialog" is displayed, where you select the Oracle BI EE content to which to navigate, and then the "Create New Action dialog" is displayed.
  - Navigate to EPM Content, first the "Select the Hyperion resource you want this action to invoke dialog" is displayed, where you select the Hyperion resource to which to navigate, and then the Create New Action dialog is displayed.

- Invoke a Web Service, the "Select Web Service Operation dialog" is displayed, where you select a Web Service operation to be invoked or enter the URL for the WSDL if the web service is not preconfigured, and then the Create New Action dialog is displayed.
- Invoke a Java Method, the "Select Java Method dialog" is displayed, where you select the Java method to be invoked, and then the Create New Action dialog is displayed.
- Any other action type, the Create New Action dialog is displayed.
- 2. Depending on the type of action that you are creating or editing, do one of the following:

| Action Type                  | What You Do   |  |  |
|------------------------------|---|--|--|
| Navigate to a Web Page       | In the <b>URL</b> field, enter the URL of the Web page.   |  |  |
| or                           | Tip: You can highlight the URL in the browser and copy  |  |  |
| Invoke an HTTP Request       | and paste it into the <b>URL</b> field.   |  |  |
| Invoke a Browser Script      | In the <b>Function Name</b> field, enter the name of the function to be executed or click <b>Browse</b> and complete the "Select Script Function dialog".   |  |  |
|                              | If the script has parameters defined for it and you selected the function in the Select Script Function dialog, then the parameters are displayed in the <b>Define Parameters</b> list. If you manually entered the function name, then you must manually add the parameters. |  |  |
| Invoke Server Script         | In the <b>Language</b> box, select <b>JavaScript</b> or <b>VB Script</b> , and then in the <b>Script Path</b> field, enter the path of the script to be executed.   |  |  |
| Invoke Agent                 | Click <b>Browse</b> and complete the "Select Existing Agent dialog".  |  |  |
| Navigate to E-Business Suite | In the <b>Define Parameters</b> list, define these mandatory parameters:  |  |  |
|                              | <ul> <li>FunctionCode — The name of the function that<br/>relates to the target E-Business Suite form, for<br/>example, GLXIQJRN</li> </ul>   |  |  |
|                              | <ul> <li>ConnectionPool — The name of the connection pool<br/>for the Oracle E-Business Suite database in the Oracle<br/>BI repository, for example, EBS12</li> </ul>   |  |  |
|                              | You can also define optional parameters for passing the context from Oracle Business Intelligence to EBS forms.   |  |  |
|                              | For information on defining parameters, see the steps for defining parameters in this procedure.  |  |  |
|                              | For information on integrating with Oracle E-Business Suite security, see <i>Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition</i> .  |  |  |

- (for an Invoke an HTTP Request only) In the **Request** box, select one of the following options:
  - **Get** Invokes the URL as an HTTP GET request.
  - **Post** Invokes the URL as an HTTP POST request.

- **4.** (for an Invoke Agent action only) In the **Execute for Recipients** box, select the scope of recipients. For example, if you want the recipients to be the same as the recipients of the selected agent, then select Of Specified Agent.
- 5. (optional; not available for Navigate to BI Content actions) If you want to define parameters for the action, then perform the following steps:
  - a. If the Define Parameters list is not displayed, then click Define Parameters to display it.
  - **b.** Click the **Add Parameter** button for each parameter you want to add. A new parameter row is added to the **Define Parameters** list.
- **6.** If the action has parameters, then define the parameters. To do so, for each parameter in the list:
  - In the Name column, if you are creating a new parameter, then enter the name of the parameter. Use a name that is unique within the action.
    - This column is not available for some action types.
  - **b.** In the **Prompt** column, if you want the user to provide the parameter value, then enter the prompt to display to the user.
  - **c.** In the **Value** column, if you want to provide a parameter value, then enter or select the value. If you want the user to specify the value, then leave this field
  - **d.** In the **Fixed** column, specify whether to allow users to see but not set the parameter.
  - **e.** In the **Hidden** column, specify whether to hide the parameter from users.
  - In the **Optional** column, whether the parameter requires a value before the action can be executed.
- 7. (optional) Customize information displayed to the user when the action runs:
  - **a.** Click **Options** to display the "Action Options dialog".
  - **b.** Specify the customization that you want.
  - c. Click OK.

This functionality is available only for actions where it is appropriate to display information to users.

8. Click OK.

If you are creating a named action, then a dialog is displayed where you specify the information for saving the action.

# Adding Actions to Analyses

You can add one or more actions to a column heading, column value, or hierarchy level value in an analysis. When you add an action to a column heading, column value, or hierarchy level value, you add the action by using an action link.

When an analysis that contains one or more action links is presented to users in a pivot table, table, map, graph, or gauge, users can click a link to run the associated action.

For more information on action links, see "What Are Action Links and Action Link Menus?"

To add one or more actions to an analysis:

- 1. Edit the analysis to which you want to add one or more actions.
- Move the mouse pointer over the **Options** button for the column or hierarchy level to which you want to add one or more actions and select Column Properties or Hierarchy Level Properties.

The "Column Properties dialog" is displayed.

- **3.** Click the "Column Properties dialog: Interaction tab".
- **4.** In the **Primary Interaction** box in the **Column Heading** area (if you want to add one or more actions to a column heading) or the Value area (if you want to add one or more actions to a column value or hierarchy level value), select **Action** Links to display the Action Links area.
- **5.** To add an action that has been saved as a systemwide default for the column or level, click the **Add Action Link** button and select the action.

(For more information on saving systemwide defaults for a column or level, see "Column Properties dialog".)

- To add a new action:
  - If one or more actions have been saved as systemwide defaults for the column or level, then click the Add Action Link button and select New Action Link.
  - If no actions have been saved as systemwide defaults for the column or level, then click the Add Action Link button.

The "New Action Link dialog" is displayed.

- 7. In the Link Text field, enter the text to display as the link to execute the associated action.
- **8.** If you want to create a new action (that is, an inline action), then click the **Create New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions".
- **9.** If you want to add an existing named action (that is, a named action):
  - **a.** Click the **Select existing action** button.

The "Open dialog" is displayed.

**b.** Complete the Open dialog.

If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.

- **c.** Complete the Edit Parameter Mapping dialog (if displayed).
- 10. If you are adding the action link to a value, then in the Show Link component in the New Action Link dialog, select one of the following options:
  - **Always** Specifies that the action link is always to be enabled.
  - **Conditionally** Specifies that the action link is to be enabled only under certain conditions.

Selecting this option displays the **Conditions** area.

For more information, see "About Conditionally Enabling Actions".

If you are adding the action link to a column heading, then the **Conditionally** option is not available.

**11.** If you selected **Conditionally**, then add one or more conditions to be used to enable the action link. For each condition that you want to add:

- a. Click the New Condition button and select the column to use. The "New Condition dialog" is displayed.
- **b.** Complete the New Condition dialog.
- **12.** In the New Action Link dialog, click **OK** to add the action link to the Action Links area on the Interaction tab.
- **13.** For each additional action link that you want to add, repeat steps 5-12.
- **14.** To specify that, when only one action link is available at runtime, the action link is to be executed immediately rather than be displayed in a menu for selection, select the **Do not display in a popup if only one action link is available at runtime** box.
- **15.** Click **OK** to close the Column Properties dialog.
- **16.** Click the **Save Analysis** toolbar button on the Analysis editor to save the analysis.

# About Adding Actions to Dashboard Pages

You can add actions to dashboard pages in one of two ways:

- By adding to a section on the dashboard page an Action Link object to which you add an action.
  - When a dashboard page that contains one or more action links is presented to users, users can click a link to run the associated action.
- By adding to a section on the dashboard page an Action Link Menu object to which you add action links.
  - When a dashboard page that contains an action link menu is presented to users, users can select a link from the action link menu to run the associated actions.

For more information on action links and action link menus, see "What Are Action Links and Action Link Menus?"

# Adding Actions to Dashboard Pages Using Action Links

To add an action to a dashboard page using an action link:

- Edit the dashboard page to which you want to add an action.
- From the Dashboard Object pane, drag and drop an Action Link object on the dashboard page.
- 3. Click the **Properties** button for the Action Link object to display the "Action Link Properties dialog".
- 4. Complete the Action Link Properties dialog. For information, see "Completing the Action Link Properties Dialog".
- 5. Click the Save toolbar button on the Dashboard builder to save the dashboard page.

# Completing the Action Link Properties Dialog

When you add actions to dashboard pages either by using action links or action link menus, you create action links by completing the "Action Link Properties dialog".

#### To complete the Action Link Properties dialog:

1. In the Link Text box, enter the text to display as the link to execute the associated action.

- 2. If you are creating an action link that will not be displayed on an action link menu, then in the **Caption** box, enter a caption to display above the link text.
- **3.** If you want to create a new action (that is, an inline action), then click the **New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions".
- **4.** If you want to add an existing action (that is, a named action):
  - **a.** Click the **Select existing action** button.
    - The "Open dialog" is displayed.
  - **b.** Complete the Open dialog.
    - If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.
  - Complete the Edit Parameter Mapping dialog (if displayed).
- (for an action link that navigates to a URL or to other BI content only) Use the **Open Link in New Window** box in the Action Link Properties dialog to specify whether to open the link in a new browser window or tab.
- **6.** (for Navigate to BI Content actions only) Use the **Add to Briefing Book** box to specify whether the action that is associated with the action link can be executed in a briefing book, but only if the number of briefing book navigation links to be followed is greater than 0.
  - For information about briefing books, see "Working with Briefing Books".
- 7. In the **Show Link** component, select one of the following options:
  - **Always** Specifies that the action link is always to be enabled.
  - **Conditionally** Specifies that the action link is to be enabled only if the associated condition is satisfied.
    - The Condition area is displayed.
- **8.** If you selected **Conditionally**, then specify the condition as follows:
  - To create a new condition, click the New Condition button to display the "New Condition dialog" and then complete the dialog.
    - For information on completing the dialog, see "Specifying the Settings for Conditions".
  - To select an existing condition, click **Select Condition** to display the "Select Condition dialog" and then complete the dialog.
- Click **OK** in the Action Link Properties dialog.

# Adding Actions to Dashboard Pages Using Action Link Menus

To add one or more actions to a dashboard page using an action link menu:

- Edit the dashboard page to which you want to add one or more actions.
- From the Dashboard Object pane, drag and drop an Action Link Menu object on the dashboard page.
- **3.** Click the **Properties** button for the Action Link Menu object to display the "Action Link Menu Properties dialog".
- **4.** In the **Menu Label** box, enter the name to display for the menu.

- **5.** In the **Caption** box, enter a caption to display above the action link menu text.
- Add the action links to the menu as follows:
  - To add an action link that already exists on the page, drag and drop the existing Action Link object onto the Action Link Menu object.
  - To add a new action link, click the **Add** button to display the "Action Link Properties dialog" and then complete the dialog. For information, see "Completing the Action Link Properties Dialog".

**Note:** You also can drag an Action Link object from an Action Link Menu object to create a standalone action link.

- 7. Click **OK** in the Action Link Menu Properties dialog.
- **8.** Click the **Save** toolbar button on the Dashboard builder to save the dashboard page.

# **Adding Actions to Agents**

You can add one or more actions to an agent.

#### To add an action to an agent:

- 1. Edit the agent to which you want to add an action.
- 2. Click the "Agent editor: Actions tab".
- Determine whether to add the action to the **Agent Condition True or No Condition Exists** area or the **Agent Condition is False** area as follows:
  - If there is no condition associated with the agent, or if there is a condition associated with the agent and you want the action to execute only if the condition evaluates to true, then use the Agent Condition True or No **Condition Exists** area
  - If there is a condition associated with the agent and you want the action to execute only if the condition evaluates to false, then use the Agent Condition **is False** area.
- **4.** If you want to create a new action (that is, an inline action), then click the **Add New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions".
- If you want to add an existing action (that is, a named action):
  - **a.** Click the **Add Existing Action** button. The "Select Existing Action dialog" is displayed.
  - **b.** Complete the Select Existing Action dialog.

**Note:** You cannot add an existing action that navigates to related content (such as Navigate to BI Content) or an existing Invoke a Browser Script action to an agent.

If there are parameters associated with the action, then the "Add Existing Action dialog" is displayed.

- Specify any required parameter values in the Add Existing Action dialog.
- Click **OK**.
- (not available for Invoke Server Script actions, Invoke Agent actions, or actions for which one of the parameters is a result set mapping) Select the **Invoke per Row** option if you have specified a condition for the agent and want to execute the action for each row returned by the condition.
- 7. Click the **Save this Agent** toolbar button in the Agent editor to save the agent.

# Adding Actions to KPIs

You can add one or more actions to a KPI. When you add an action to a KPI, you add the action by using an action link.

When a KPI that contains one or more action links is presented to end users (generally in a scorecard or a KPI watchlist), users can click a link to run the associated action.

#### To add one or more actions to a KPI:

- Edit the KPI to which you want to add one or more actions.
- Click the "KPI editor: Thresholds page".
- Click the **Define action links for this status** button to display the "Action Links dialog".
- **4.** To add an action that has been added to another range of the KPI, click the **Add** Action Link button and select the action.
- To add a new action:
  - If one or more actions have been added to another range of the KPI, click the Add Action Link button and select New Action Link.
  - If no actions have been added to other ranges of the KPI, then click the Add Action Link button.

The "New Action Link dialog" is displayed.

- **6.** In the **Link Text** field, enter the text to display as the link to execute the associated
- 7. If you want to create a new action (that is, an inline action), then click the **Create New Action** button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions".
- **8.** If you want to add an existing action (that is, a named action):
  - **a.** Click the **Select existing action** button.
    - The "Open dialog" is displayed.
  - **b.** Complete the Open dialog.
    - If there are parameters associated with the action, then the "Edit Parameter Mapping dialog" is displayed.
  - **c.** Complete the Edit Parameter Mapping dialog (if displayed).
- Click **OK** in the New Action Link dialog.
- **10.** For each additional action link that you want to add, repeat steps 5-9.
- **11.** Click **OK** to close the Action Links dialog.

**12.** Click the **Save KPI As** toolbar button on the KPI Builder to save the KPI.

# Adding Actions to Initiatives and Objectives in Scorecards

You can add one or more actions to an initiative or objective in a scorecard. When you add an action to an initiative or objective, you add the action by using an action link.

#### To add one or more actions to an initiative or objective:

- 1. Edit the scorecard that contains the initiative or objective.
- Navigate to the initiative or objective to which you want to add an action as follows:
  - If you are adding the action to an initiative, then in the "Initiatives pane", double-click the initiative.
  - If you are adding the action to an objective, then in the "Strategy pane", double-click the objective.
- **3.** In the Action Link area in the "Analytics pane", click the **New Row** button. The "Action Link dialog" is displayed.
- **4.** In the **State Equals** box, select the state of the initiative or objective under which the action link is to be enabled.
- **5.** If you want to create a new action (that is, an inline action), then click the Create New Action button and specify the settings for the new action. For information, see "Specifying the Settings for New Actions".
- **6.** If you want to add an existing action (that is, a named action):
  - **a.** Click the **Select Existing Action** button. The "Open dialog" is displayed.
  - **b.** Click **OK**.
- 7. In the Link Text field, enter the text to display as the link to execute the associated action.
- **8.** Click **OK** in the Action Link dialog. The action link is added to the Action Link area.
- **9.** Save the objective or initiative.

# Creating a New Action Based on an Existing Named Action

You can create a new action based on an existing named action.

For example, suppose that your organization has an existing named action Send Message that sends an e-mail message. Its parameters include a recipient, subject, message, and priority. You can create a new action that is based on this Send Message action that sends a high priority message. To do so, you provide a high priority value for the priority parameter and save the new action with a new name, such as Send High Priority Message.

#### To create a new action based on an existing named action:

- 1. Edit the existing named action on which you want to base a new action. The "Edit Action dialog" is displayed.
- Specify any changes that you want.

Click **Save As** and specify the save as criteria in the dialog.

# **Editing Named Actions**

#### To edit a named action:

- Navigate to the action in the catalog.
- Click the **Edit** link to display the "Edit Action dialog".
- Edit the action and click **OK**.
- Click Save Action.

# **Editing Actions and Action Links Added to Analyses**

To edit an action and action link that have been added to an analysis:

- Edit the analysis to which the action and action link has been added.
- Move the mouse pointer over the **Options** menu for the column or hierarchy level to which the action has been added and select Column Properties or Hierarchy Level Properties.

The "Column Properties dialog" is displayed.

- Click the "Column Properties dialog: Interaction tab".
- In the Action Links area, select the action that you want to edit and click the Edit **Action Link** button to display the "Edit Action Link dialog".
- Make the changes that you want to the action link.
- Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.
- Edit the action and click **OK**.
- Click **OK** in the Edit Action Link dialog.
- Click **OK** in the Column Properties dialog.
- 10. Click Save Analysis.

# Editing Actions, Action Links, and Action Link Menus Added to **Dashboard Pages**

To edit an action, action link, or action link menu that has been added to a dashboard page:

- Edit the dashboard page.
- If the action and action link are associated with an action link menu:
  - Click the **Properties** button for the Action Link Menu object. The "Action Link Menu Properties dialog" is displayed.
  - **b.** Make the changes that you want to the menu label and caption.
  - In the Action Links area, select the action that you want to edit and click the Edit button.

The "Action Link Properties dialog" is displayed.

- **3.** If the action and action link are standalone, click the **Properties** button for the Action Link object to which the action is associated. The "Action Link Properties dialog" is displayed.
- **4.** Make the changes that you want to the action link.
- Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.
- **6.** Edit the action and click **OK**.
- Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).
- **8.** Click **Save** to save the dashboard.

# **Editing Actions Added to Agents**

You can edit an action that you have added to an agent. If the action is an inline action, then you can edit the entire action. If the action is a named action, then you can edit only the parameter values.

#### To edit an action that has been added to an agent:

- Open the agent.
- Click the "Agent editor: Actions tab".
- Select the action and click the **Edit Parameters** button. The "Edit Action dialog" is displayed.
- Edit the action and click **OK**.

# **Editing Actions and Action Links Added to KPIs**

To edit an action and action link that have been added to a KPI:

- Edit the KPI to which the action and action link has been added.
- Click the "KPI editor: Thresholds page".
- 3. Click the **Define action links for this status** button to display the "Action Links dialog".
- 4. In the Action Links area, select the action that you want to edit and click the Edit **Action Link** button to display the "Edit Action Link dialog".
- Make the changes that you want to the action link.
- Click the **More** button and select **Edit Action**. The "Edit Action dialog" is displayed.
- **7.** Edit the action and click **OK**.
- Click **OK** in the Edit Action Link dialog.
- Click **OK** in the Action Links dialog.
- 10. Click Save KPI As.

# Editing Actions and Actions Links Added to Initiatives and Objectives in **Scorecards**

To edit an action and action link added to an initiative or objective:

- **1.** Edit the scorecard that contains the initiative or objective.
- Navigate to the initiative or objective as follows:
  - For an initiative, in the "Initiatives pane", double-click the initiative.
  - For an objective, in the "Strategy pane", double-click the objective.
- In the Action Link area in the "Analytics pane", click the **Edit Row** button. The "Action Link dialog" is displayed.
- Make the changes that you want and click **OK** in the Action Link dialog.
- Save the objective or initiative.

# Saving Inline Actions in Analyses to the Catalog

To save an inline action in an analysis:

- Edit the analysis to which the action has been added.
- Move the mouse pointer over the **Options** menu for the column or hierarchy level to which the action has been added and select Column Properties or Hierarchy Level Properties.

The "Column Properties dialog" is displayed.

- **3.** Click the "Column Properties dialog: Interaction tab".
- In the Action Links area, select the action that you want to save and click the Edit **Action Link** button. The "Edit Action Link dialog" is displayed.
- 5. Click the More button and select Save Action As to display the "Save As dialog" to specify the save criteria.
- Specify the save criteria and click **OK**.

**Tip:** If you want to replace the reference to the current action with the saved action, then select the **Replace current action with a** reference to the saved action box.

- Click **OK** in the Edit Action Link dialog.
- Click **OK** in the Column Properties dialog.

# Saving Inline Actions in Dashboards to the Catalog

To save an inline action in a dashboard to the catalog:

- Edit the dashboard page.
- If the action and action link are associated with and action link menu:
  - Click the **Properties** button for the Action Link Menu object. The "Action Link Menu Properties dialog" is displayed.
  - **b.** Make the changes that you want to the menu label and caption.
  - In the Action Links area, select the action that you want to edit and click the Edit button.

The "Action Link Properties dialog" is displayed.

- 3. If the action and action link are standalone, then click the **Properties** button for the Action Link object to which the action is associated. The "Action Link Properties dialog" is displayed.
- **4.** Click the **More** button and select **Save Action As**. The "Save As dialog" is displayed.
- **5.** Edit the action and click **OK**.
- 6. Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).
- **7.** Click **Save** to save the dashboard.
- **8.** Click the **More** button and select **Save Action As** to display the dialog to specify the save criteria.
- **9.** Specify the save criteria and click **OK**.

**Tip:** If you want to replace the reference to the current action with the saved action, then select the Replace current action with a reference to the saved action box.

- 10. Click **OK** in the Action Link Properties dialog, and then in the Action Link Menu Properties dialog (if displayed).
- **11.** Click **Save** to save the dashboard.

# **Executing a Named Action to Test It**

After creating a named action, you can test it to ensure that it executes properly.

#### To execute a named action to test it:

- 1. Navigate to the named action in the catalog.
- **2.** Click the **Execute** link.
- Respond to any request for more information or any confirmation prompt that is displayed.

**Note:** A successful invocation message indicates only that the action itself ran successfully. It does not indicate that the process or operation that the action represents ran successfully.

# **Using KPIs and KPI Watchlists**

This chapter explains Key Performance Indicators (KPIs) and KPI watchlists and how to create and use them. It contains the following topics:

- "What Are KPIs?"
- "How Are KPIs Evaluated?"
- "How Can I Use KPIs?"
- "What Are Dimensions and Pinned Dimension Values?"
- "Opening KPIs for Editing"
- "Creating or Editing KPIs"
- "Generating an Analysis from a KPI"
- "Creating an Agent From a KPI"
- "Contacting the Business Owner of a KPI"
- "About Overriding the Status of a KPI"
- "About Adding Comments to a KPI"
- "What Are KPI Watchlists?"
- "Creating or Editing KPI Watchlists"

#### What Are KPIs?

KPIs are measurements that define and track specific business goals and objectives that often roll up into larger organizational strategies that require monitoring, improvement, and evaluation. KPIs have measurable values that usually vary with time, have targets to determine a score and performance status, include dimensions to allow for more specific analysis, and can be compared over time for trending purposes and to identify performance patterns.

See the following list of specific uses for KPIs in Oracle BI EE:

- Evaluate metrics against their targets and alert the appropriate users via agents when targets are not met.
- Create an analysis from a KPI and add that analysis to a dashboard. An analysis that is created from a KPI can allow the user to drill into different levels of details based on the KPI's dimensions.

For example, to a KPI called "Product Sales," you can add the Region and Fiscal Time dimensions to view Product Sales figures by region and time periods such as financial quarters. This enables you to gather multi-dimensional subsets of data

- and evaluate the performance of objectives and initiatives that the KPI measures against the different target values of the dimensional metrics.
- In Oracle Scorecard and Strategy Management, use KPIs to evaluate and monitor the performance of the objectives that form the strategy and the initiatives (tasks or projects) that are needed to meet your objectives. For information about scorecards and how to create them, see Chapter 12, "Scorecarding."

For example, use KPIs for "Average Customer Satisfaction Survey Score" and "Repeat Orders" to measure the performance of an "Improved Customer Satisfaction" objective.

#### How Are KPIs Evaluated?

A KPI's status and score are determined by comparing its actual value against the thresholds that you define. The performance status of a KPI is represented by the status icon that you assign to each range.

For example, for a product sales KPI in which high values are desirable, you can define the ranges that are described in Table 11–1. Thresholds are the numeric values that separate the ranges.

| Evaluation Range Rule   | Threshold     | Name       | Status Icon      |
|---|---------------|------------|------------------|
| Values exceeding 125 (125 < x) indicate ideal performance                       | 126 and above | Ideal      | Blue square      |
| Values between 100 and 125 (100 < x <= 125) indicate good performance           | 125           | Good       | Green square     |
| Values between 80 and 100 (80 < x <= 100) indicate acceptable performance       | 100           | Acceptable | Yellow square    |
| Values between 50 and 80 (50 < x < = 80) indicate a warning of poor performance | 80            | Warning    | Light red square |
| Values less than 50 (x $\leq$ 50) indicate critical performance                 | 50 and below  | Critical   | Dark red square  |

### How Can I Use KPIs?

KPIs are created with the KPI Editor, which can be accessed as a stand-alone editor or within the "Scorecard editor". After you create and save KPIs, you can use them in the following ways:

- Building blocks of scorecards You can create and assign KPIs to measure the progress and performance of your organization's strategies. Within a scorecard, you can define the *objectives* (goals such as "Decreased Operational Costs") and initiatives (processes or tasks such as "Form Cost Minimization Team") to which you assign KPIs to measure progress and performance. For information about objectives, see "What Are Objectives?". For information about initiatives, see "What Are Initiatives?"
- **As an analysis** You can generate an analysis from a KPI. When you do this, Oracle BI EE saves the analysis to the catalog. You can include the analysis on a dashboard or as a related document in a scorecard, KPI watchlist, or KPI. Any dimension values that you pinned to the KPI before you output it as an analysis are included in the analysis. Drill-down is available on the analysis. Oracle BI EE refreshes the data for the analysis every time a user opens the analysis.

- **Included in KPI watchlists** You can create a watchlist that contains a group of KPIs or to present one KPI several times with dimension values that are pinned to it. After you save the watchlist, it is available as a catalog object that you can add to dashboards or scorecards. When users access the watchlist, they can change the dimension values for the KPIs that are included in the watchlist.
- Facilitate user interaction If KPIs were added to a KPI watchlist or if they were added to strategy or initiative nodes inside a scorecard, then you can post comments to a KPI and read and reply to other users' comments. You can also contact the KPI's business owner with questions or comments about the KPI. And, if you are the business owner, you can override a KPI's status.
- **Initiate actions** You can add an action link that when clicked in the KPI runs an associated action. For example, if the performance of a KPI for Internal Spending is too high, indicating excessive spending, then you could create an action link that when clicked, sends an email to the appropriate employees.
- **Trigger agents** You can use a KPI's values, performance levels, and status to trigger a condition that will initiate an agent alert. For example, you can define an agent that notifies you when the value of a Internal Costs KPI exceeds a certain dollar amount.

### What Are Dimensions and Pinned Dimension Values?

Dimensions are categorizations of data, and the categorizations reflect how a business analyst wants to analyze data. When analysts say they want to see numbers "by" something or "over" something, they are identifying the dimensions of the data. Common dimensions are geography, product, customer, and time.

For KPIs, you can select any attribute column from the subject area as a dimension. When you design the KPI, you can either pin a specific data value to one or more dimensions (for example, Region = Central), or you can specify that you want all or some dimension values pinned when the KPI is added to a watchlist or scorecard. Pinning filters the data that the user sees, and after a value is pinned by the designer, the user cannot change the value.

When adding a KPI without a pre-pinned value to a watchlist, the designer can pin a specific value or specify a session or repository variable to set the dimension's value. If the designer does not pin a value to a dimension, then the KPI user can select a value at runtime from the point of view area in either the KPI watchlist, from the scorecard that contains the KPI, or from the variable prompt on a dashboard.

If a KPI with dimensions is output to an analysis, then the dimensions are displayed as columns and drills. If the dimension values are pinned, then the analysis is limited to the data that is determined by the pinned values.

# Opening KPIs for Editing

Use the following procedures to open a saved KPI in the "KPI editor". KPIs are stored in the catalog, but can be added to watchlists, scorecards, and dashboards. When you edit and save a KPI, the changes propagate to wherever the KPI is displayed.

For information about creating a KPI, see "Creating or Editing KPIs".

# Opening KPIs in the Catalog

Use the following procedure to open a KPI in the catalog.

To open a KPI in the Catalog:

- 1. In the global header, click **Catalog**. The "Catalog page" is displayed.
- Search or browse for the KPI. For information, see "Searching with the Basic Search".
- **3.** Click the **Edit** link for the object. The "KPI editor" is displayed.

### Opening KPIs From a Watchlist

Use the following procedure to open a KPI from a watchlist.

#### To open a KPI from a watchlist:

- **1.** In a KPI watchlist, right-click the KPI that you want to open.
- Select **Open KPI Definition**. The "KPI editor" is displayed.

### Opening KPIs From a Scorecard

Use the following procedure to open a KPI definition from a scorecard. KPIs can be located in a scorecard's strategy tree or initiatives. You can also open a KPI from a scorecard by using the "Catalog pane for Scorecard".

Note that you can modify the label or pinning for a particular usage of a KPI within a Scorecard strategy or initiative tree. However, if you want to change the underlying KPI definition, which affects all usages of the KPI, follow the instructions below to open the KPI editor.

#### To open a KPI definition from a scorecard:

- Expand the strategy tree or initiative tree and double-click the KPI. Or, open a KPI watchlist from the "Scorecard Documents pane," right-click a KPI, and select **Open KPI Definition**. The "Scorecard editor" displays the KPI in a new tab.
- 2. Click Open KPI Definition on the tab's toolbar. The "Scorecard editor" opens a new tab that displays the "KPI editor".

# Creating or Editing KPIs

Use the following procedure to create or edit a KPI. You can create or edit a KPI from the global header, the Home page, or from a scorecard.

#### To create or edit a KPI:

- 1. Open a KPI for editing or create a new KPI. For information about opening a KPI, see "Opening KPIs for Editing". To create a new KPI, do one of the following:
  - In the global header, hover the mouse pointer over the **New** menu, select **KPI**, and from the Select Subject Area dialog, select a subject area for the KPI. The "KPI editor" is displayed.
  - From a scorecard, go to the Scorecard Documents pane or the Catalog pane, click the **New Object** icon list, select **KPI**, and from the Select Subject Area dialog, select a subject area for the KPI. The "KPI editor" is displayed.
- 2. On the "KPI editor: General Properties page", specify the business owner, actual value, and target value, and indicate if you want to enable trending to determine performance patterns. Oracle recommends that you enable trending because trending enables Scorecard to automatically display historical trend charts.
- **3.** On the "KPI editor: Dimensionality page", select the dimensions (for example, Sales by Region and by Financial Quarter) that you want to use to aggregate the

- KPI's actual and target values. Note that you should include a time dimension for most KPIs. Exceptions include constants or metrics that are defined as current snapshots, such as "Inventory on Hand" or "Current Phone Support Wait Time."
- 4. On the "KPI editor: Thresholds page", indicate the desired goal based on KPI values (for example, "High Values are Desirable"), define the ranges that evaluate KPI values to determine performance status, and associate performance levels with actions.
- 5. On the "KPI editor: Related Documents page", add any external links or business intelligence objects to the KPI.
- **6.** Save the KPI. Note the following items:
  - If you are creating a stand-alone KPI, then click **Finish** to save the KPI.
  - If you are creating a new KPI, then the "Save As dialog" is displayed where you specify the KPI's name and where you want to save the KPI. If you want the KPI to display within a scorecard's "Scorecard Documents pane", then save the KPI to the scorecard object's folder within the catalog.
  - If you are creating a KPI from a scorecard, then click Save from the "Scorecard editor".

# Generating an Analysis from a KPI

Use the following procedures to generate an analysis from a KPI. An analysis is a query against an organization's data that provides answers to business questions such as "What are my yearly regional sales of a specific beverage?" For more information about analyses, see Chapter 2, "Creating Analyses."

You can generate an analysis from a KPI that is included in a KPI watchlist, scorecard, or scorecard diagram view on a dashboard. After you generate the analysis, it is stored in the catalog's Drills folder (/My Folders/Drills). Note that because the My Folders/Drills folder is used for temporary storage, the analysis might not persist after your session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

After the analysis is generated, the analysis can then be placed onto a dashboard, opened from the catalog as an analysis, or attached as a related document in a scorecard, KPI watchlist, or KPI. Every time a user opens the analysis, its data is refreshed.

#### To generate an analysis from a KPI on a watchlist:

- 1. Locate and open the KPI watchlist from the catalog, scorecard, or dashboard that contains the KPI watchlist.
- **2.** Go to the Performance tab and within the New KPI Watchlist table, select the row that contains the KPI that you want to output to an analysis.
- From the **Objects** list, select **Analyze**. A new browser tab opens and displays the analysis, and Oracle BI EE saves the analysis to the catalog's Drills folder (/My Folders/Drills).

#### To output an analysis from a KPI on a scorecard:

1. Expand the scorecard's strategy tree, initiative tree, Scorecard Documents pane, or Catalog pane and select a KPI.

2. Right-click the KPI and select **Analyze**. A new browser tab opens and displays the analysis, and Oracle BI EE saves the analysis to the catalog.

# Creating an Agent From a KPI

Use the following procedure to create an agent from a KPI using the **Create Agent** option. This option is available from the **More** list on the "Catalog page" and from the **New Object** list in the Scorecard Editor's "Catalog pane". When you create an agent using this method, Oracle BI EE does the following:

- Uses the KPI dimensions, dimension values that you specify, and status to create a condition that is based on the KPI and adds the condition to the "Agent editor: Condition tab".
- Outputs the KPI as an analysis, saves the analysis to the catalog, and attaches the analysis to the "Agent editor: Delivery Content tab".

For more information about agents, see Chapter 8, "Delivering Content."

#### To create an agent from a KPI:

- 1. Locate the KPI from which you want to create an agent using one of the following methods:
  - From the "Catalog page", browse for and locate the KPI. In the "Catalog area", click the KPI's More list and select Create Agent. The "Create New Agent dialog" is displayed.
  - From anywhere in scorecard (Strategy pane, Initiatives pane, Scorecard Documents pane, Catalog pane, or any tab within the Scorecard Editor), select a KPI, right-click, and select Create Agent. The "Create New Agent dialog" is displayed.
- 2. In the Name field, enter a name for the agent and complete the Create New Agent dialog. Click **OK**.
  - The "Agent editor" is displayed and the information that you specified in the Create New Agent dialog defaults into the "Agent editor: Condition tab" and the "Agent editor: Delivery Content tab".
- 3. Complete and save the agent. For more information, see "Creating Agents".

# Contacting the Business Owner of a KPI

Use the following procedures to send a message to a KPI's business owner. The business owner is the person who is responsible for managing the KPI. Upon the creation or modification of the KPI, the KPI designer selects the business owner from the Oracle BI EE user list.

Oracle BI EE uses the delivery devices and profiles that the business owner has specified in the "My Account dialog: Delivery Options tab" to determine where to deliver the message (for example, email, phone, or pager).

#### To contact the KPI's business owner from a KPI watchlist:

- 1. Locate and open the KPI watchlist from the catalog, open a dashboard that contains a KPI, or open the scorecard that contains the KPI watchlist.
- **2.** Go to the **Performance** tab and within the New KPI Watchlist table, select the row that contains the KPI whose owner you want to contact.

- **3.** From the **Objects** list, select **Contact Owner**. The "Contact Owner dialog" is displayed.
- **4.** In the **Message** field, enter a message to the KPI's owner.
- Click **Send**.

#### To contact the KPI's business owner from a scorecard:

- Expand the scorecard's strategy tree, initiative tree, or scorecard documents folder and select a KPI.
- 2. Right-click the KPI and select Contact Owner. The "Contact Owner dialog" is displayed.
- **3.** In the **Message** field, enter a message to the KPI's owner.
- Click Send.

# About Overriding the Status of a KPI

A KPI's status can be overridden only by the business owner. The business owner is the person responsible for managing the KPI. Upon the creation or modification of the KPI, the KPI designer selects the business owner from the Oracle BI EE user list.

The business owner can override a status if the KPI's values are old, unavailable, or otherwise do not accurately reflect the true status of what the KPI is measuring. A KPI's status remains overridden until the business owner removes the override status. For example, if there is a scorecard that contains a KPI that measures a store's sales and a fire destroys the store, causing it to be non-operational, the business owner overrides the KPI's status so that the scorecard is not unbalanced. The business owner keeps this override in place until the store is again operational.

For detailed instructions about overriding a KPI's status, see "Overriding the Statuses of Initiatives, Objectives, and KPIs".

# About Adding Comments to a KPI

Any recipient of the KPI can add comments to a KPI's columns. Commentable columns are flagged by an asterisk (\*). Recipients can also review and respond to comments entered by other users. When you access a KPI's comments, a cumulative, chronological list of comments is displayed.

For more information on adding and reviewing comments, see "Adding Comments to Initiatives, Objectives, and KPIs".

# What Are KPI Watchlists?

KPI watchlists are collections of KPIs that you build by adding the KPIs that are stored in the catalog. After you build and save a KPI watchlist, it is stored as a catalog object and can be added to dashboards and scorecards. Because KPIs cannot be viewed directly from the catalog by end users, KPI watchlists are one of the ways, along with outputting a KPI to an analysis and including a KPI on a scorecard, that KPIs are distributed to end users.

KPI watchlists provide the following KPI performance information:

- Current status
- Trend status that indicates if performance has increased, decreased, or remained the same, and if any changes are desirable

- Current and target values
- Variance value and percent by which the current value deviates from the target
- Change value and percent identify how much the current value differs from that from the previous period

KPI watchlists are useful because you can quickly build formal or informal lists for specific uses and for specific users, or, if end users are given the proper privileges, they can build their own KPI watchlists that meet their specific information needs. For example, the KPI watchlist designer might create a KPI watchlist that contains KPIs that support a specific scorecard's strategy and initiatives. Or end users might create KPI watchlists to monitor their individual objectives. For example, a sales person can create a KPI watchlist that contains KPIs that monitor quarterly sales totals within a specific region.

The KPI watchlist designer can add one KPI several times to a KPI watchlist, and each time that the KPI is added, pin different dimensions to it so that the end user can quickly see the whole picture rather than having to specify dimensions and reloading the KPI.

The KPI watchlist also provides the end user with the ability to select a KPI from the watchlist and output it to an analysis, or to contact the KPI's business owner.

# **Creating or Editing KPI Watchlists**

Use the following procedure to create or edit a KPI watchlist.

#### To create or edit a KPI watchlist:

- 1. To create a new KPI watchlist, do one of the following:
  - From the Home page, locate the global header, hover the mouse pointer over the New menu, and select KPI Watchlist. The "KPI Watchlist editor" is displayed.
  - From a scorecard, go to the Scorecard Documents pane, click the New Object icon list, and select KPI Watchlist. The "KPI Watchlist editor" is displayed.
- 2. To open an existing KPI watchlist, perform the following sub-procedure. Note that in most cases, a KPI watchlist that was created within a scorecard will be stored in the scorecard's catalog folder. For example, Shared Folders/Sales/2009 Sales Scorecard.
  - **a.** In the global header, click **Catalog**. The "Catalog page" is displayed.
  - **b.** Search or browse for the KPI watchlist. If you are searching or browsing for a KPI watchlist that is located within a scorecard folder, then you must search for and locate the scorecard object and then click the scorecard object's Expand link to find the KPI watchlist. For more information, see "Searching with the Basic Search".
  - **c.** Click the KPI watchlist object's **Edit** link. The "KPI Watchlist editor" is displayed.
- 3. If you are creating a KPI watchlist from the global header, then select any KPI from the catalog pane and drag it to the watchlist table.

If you are creating a KPI watchlist within the Scorecard Editor, then select a KPI from any pane within the Scorecard Editor and drag it to the watchlist table. The "Add KPI dialog" is displayed.

- 4. Enter a label for the KPI and if the KPI contains dimensions, then pin values to the dimensions as needed. Click OK.
- 5. To edit the KPIs included on the watchlist, edit the KPI's watchlist entry, or remove the KPI from the watchlist, select a KPI from the table, click **Objects**, and select an option. For more information, see "KPI Watchlist editor: Performance tab".
- To add or remove columns from the watchlist table, click **View** and select **Show** More Columns.... The "Show More Columns dialog" is displayed.
- 7. Click the KPI Watchlist Editor's Details tab to provide a description of the watchlist, identify a business owner, and add links to related business intelligence objects or external links. For more information, see "KPI Watchlist editor: Details tab".

#### 8. Click Save.

If you are creating a new KPI watchlist, then the "Save As dialog" is displayed where you specify the KPI watchlist's name and where you want to save the watchlist.

If you want the watchlist to display within a scorecard's "Scorecard Documents pane", save the watchlist to the scorecard object's folder within the catalog.

| Creating o | r Editina | KPI | Watchlists |
|------------|-----------|-----|------------|
|------------|-----------|-----|------------|

# **Scorecarding**

This chapter describes scorecards and explains how to work with them. It contains the following topics:

- "What is Oracle Scorecard and Strategy Management?"
- "What is a Balanced Scorecard?"
- "What is the Scorecard Editor?"
- "What are Scorecard Objects?"
- "How Do I Create a Scorecard?"
- "What Privileges and Permissions Are Required for Scorecards?"
- "Using the Edit and View Modes in the Scorecard Editor"
- "Creating Scorecards"
- "Opening or Editing Scorecards"
- "What Are Vision Statements?"
- "Defining Vision Statements"
- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Perspectives?"
- "Creating Custom Perspectives"
- "What Are Key Performance Indicators (KPIs)?"
- "What Are KPI Watchlists?"
- "What Are Objectives?"
- "Creating Objectives"
- "What Are Initiatives?"
- "Creating Initiatives"
- "Opening Objectives or Initiatives Within Scorecards"
- "Understanding Initiative or Objective Performance Assessment"
- "Assigning Weights to Child Objectives, Initiatives and KPIs"
- "Defining Assessment Mappings for Scorecards"
- "About the Point of View Area"

- "Setting Up the Point of View Controls"
- "What Are Strategy Trees?"
- "Creating Strategy Trees"
- "What Are Strategy Maps?"
- "Creating Strategy Maps"
- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"
- "What Are Custom Views?"
- "Creating Custom Views"
- "Working with KPI Details"
- "Viewing Overview Information"
- "Editing Scorecard Objects"
- "Deleting Scorecard Objects"
- "Adding Scorecard Objects to Dashboards"
- "About Status Overrides"
- "Overriding the Statuses of Initiatives, Objectives, and KPIs"
- "Contacting Business Owners"
- "About Comments"
- "Adding Comments to Initiatives, Objectives, and KPIs"
- "Replying to Comments Attached to Initiatives, Objectives, and KPIs"
- "Displaying Comments in Views"

# What is Oracle Scorecard and Strategy Management?

Oracle Scorecard and Strategy Management is a performance management tool that lets you describe and communicate your business strategy. You can drive and assess your corporate strategy and performance from the top of your organization down, or from the bottom up.

Oracle Scorecard and Strategy Management also enables you to either align your objectives and initiatives with traditional balanced scorecard perspectives, or to create your own to reflect your fundamental business competencies. For more information on a balanced scorecard, see "What is a Balanced Scorecard?"

Use Oracle Scorecard and Strategy Management to:

- Simultaneously define the objectives (that is, goals such as Decreased Operational Costs) and initiatives (that is, processes or tasks such as Form Cost Minimization Team) that form your strategy to which you assign KPIs to measure progress and performance. For more information on:
  - Objectives, see "What Are Objectives?"
  - Initiatives, see "What Are Initiatives?"
  - KPIs, see Chapter 11, "Using KPIs and KPI Watchlists"

- Align objectives and initiatives with customized or traditional perspectives (fundamental business competencies and areas such as finance or customer relations). This later enables you to depict the extent to which corporate strategy supports these perspectives. For information on perspectives, see "What Are Perspectives?"
- Define target numeric ranges to evaluate the values of KPIs within corporate or department-level objectives and initiatives. For more information, see "Defining Assessment Mappings for Scorecards".
- Graphically communicate strategy and strategic dynamics using strategy maps, cause & effect maps, custom views, and strategy trees. For more information, see:
  - "What Are Strategy Trees?"
  - "What Are Strategy Maps?"
  - "What Are Cause & Effect Maps?"
  - "What Are Custom Views?"
- Discuss the implementation and status of objectives and initiatives by adding, reading, and replying to comments. For information on comments, see "About Comments".

**Note:** Because you use KPIs in scorecards to measure progress and performance over time, best practice is to include appropriate time dimensions when defining KPIs to be used within scorecards. For information on time dimensions, see your administrator.

### What is a Balanced Scorecard?

Traditionally, companies focus heavily on financially driven strategies without sufficiently considering other contributing perspectives, such as Customer, Internal Processes, and Learning and Growth. Because financial goals are usually backward looking, tending to be defined in terms of growth over historic numbers, they do not account for future market conditions or leverage objectives.

Use the four default perspectives provided to define strategies that holistically include all relevant perspectives and to define strategy structures that ensure stability and success in all perspectives. You can customize the perspectives provided or create your own to best align objectives, key initiatives, and KPIs with your business competencies.

The four default perspectives are:

- **Financial** —Used to identify financial measures that help to answer this question: "How do we look to our shareholders?"
- **Customer** Used to identify measures that help to answer this question: "How do customers see us?"
- **Internal Process** Used to identify measures that help to answer this question: "At what processes must we excel?"
- **Learning and Growth** Used to identify measures that help to answer this question: "How can we continue to improve and create value?"

For more information on Oracle Scorecard and Strategy Management, see "What is Oracle Scorecard and Strategy Management?"

### What is the Scorecard Editor?

The "Scorecard editor" lets you create a scorecard of your entire organization or of individual departments. It consists of numerous panes and tabs:

- On the left side of the editor are the panes that you use to create the objects that comprise your scorecard. For example, it includes the Strategy pane, which you use to create, organize, and leverage the objectives that form the strategic structure (also called Strategy Tree) of the corporate entity (department, for example) that you want to evaluate.
- On the right side of the editor is the tab area. When you first create a scorecard, you are presented with the Overview tab. This tab allows you to view summary information for the selected initiative, objective, or KPI.
  - As you create your scorecard objects, detailed tabs are generated dynamically for each object. For example, when you create an objective, a tab is generated for that objective. You use this tab to define the objective and to view detailed information about the objective, such as which KPIs are to be used to evaluate it and which initiatives drive it.
- At the top of the editor are toolbar buttons and the point of view area. The point of view area displays the dimensions of the KPIs that are used in the Scorecard to measure the progress and performance of initiatives and objectives. You use this area to pin (or set) values for the dimensions. When you pin a dimension, the data in the scorecard is filtered to give you a new point of view (that is, a new view of the data). See "About the Point of View Area".

# What are Scorecard Objects?

Scorecard objects are items that you create or arrange to:

- Represent and evaluate corporate strategy, including
  - Objectives

For information, see "What Are Objectives?"

Initiatives

For information, see "What Are Initiatives?"

Perspectives

For information, see "What Are Perspectives?"

**KPIs** 

For information, see "What Are Key Performance Indicators (KPIs)?"

- Present and analyze corporate strategy, including:
  - Vision statements

For information, see "What Are Vision Statements?"

Mission statements

For information, see "What Are Mission Statements?"

Strategy trees

For information, see "What Are Strategy Trees?"

Strategy maps

- For information, see "What Are Strategy Maps?"
- Cause & effect maps
  - For information, see "What Are Cause & Effect Maps?"
- Custom views
  - For information, see "What Are Custom Views?"
- **KPI** watchlists
  - For information, see "What Are KPI Watchlists?"
- Agents
  - For information, see "Creating an Agent From a KPI".

### **How Do I Create a Scorecard?**

To create a scorecard, you perform the following tasks. It is recommended that you perform each task in order.

- 1. Create a new scorecard to contain the scorecard objects that you need to represent, evaluate, present, and analyze your corporate strategy, such as objectives, initiatives, perspectives, and so on. See "Creating Scorecards".
- **2.** Create perspectives to represent your key business competencies (Financial or Research and Development, for example) that you can use to align initiatives and objectives. See "What Are Perspectives?" and "Creating Custom Perspectives".
- 3. Create the KPIs that gather core business data (Product Sales, for example) and specify the KPI targets, target ranges, and actions. See "What Are Key Performance Indicators (KPIs)?" and "Creating or Editing KPIs".
- 4. Create the KPI watchlists that you want to use to monitor KPIs. See "What Are KPI Watchlists?"
- 5. Create and arrange the objectives (goals or desired outcomes) for your entire organization, or for a department. This includes assigning the KPIs that measure the progress and performance of objectives. Note that the top-level objective (that is, the root objective) in the Strategy pane represents the entity (your entire organization or a department) that you are scorecarding. See "What Are Objectives?" and "Creating Objectives".
- **6.** Create and arrange the initiatives required to meet objectives. You also can assign KPIs to initiatives. See "What Are Initiatives?" and "Creating Initiatives".
- 7. Weight individual objectives and initiatives to specify how they impact the overall performance of the entity that you are scorecarding. See "Understanding Initiative or Objective Performance Assessment" and "Assigning Weights to Child Objectives, Initiatives and KPIs".
- **8.** Set assessment mappings. See "Defining Assessment Mappings for Scorecards".
- **9.** If appropriate, override the status of KPIs, initiatives, and objectives. See "Overriding the Statuses of Initiatives, Objectives, and KPIs".
- 10. Depict relationships between objectives using strategy maps, cause & effect maps, strategy trees, and custom views.
  - See "What Are Strategy Maps?", "Creating Strategy Maps", "What Are Cause & Effect Maps?", "Creating Cause & Effect Maps", "What Are Strategy

Trees?", "Creating Strategy Trees", "What Are Custom Views?", and "Creating Custom Views".

- 11. Use comments (also know as annotations) to associate explanatory text with the values of KPIs, objectives, or initiatives for a specific set of dimension values. See "About Comments".
- 12. Add scorecard views to dashboards. See "Adding Scorecard Objects to Dashboards".
- 13. Create agents from KPIs. (Agents enable you to automate your business processes.) See "Creating an Agent From a KPI".
- **14.** Optionally define the mission and vision statements that translate your corporate direction into over-arching strategic themes and thrusts that you later support by creating objectives. See "What Are Mission Statements?", "Defining Mission Statements", "What Are Vision Statements?", and "Defining Vision Statements".

# What Privileges and Permissions Are Required for Scorecards?

The ability to perform certain tasks within Oracle Scorecard and Strategy Management (such as viewing scorecards or creating scorecards) is controlled by privileges. The privileges that are specific to Scorecard include:

- Access to Scorecard
- Create/Edit Scorecards
- View Scorecards
- Create/Edit Objectives
- Create/Edit Initiatives
- Create Views
- Create/Edit Causes And Effects Linkages
- Create/Edit Perspectives
- Add Annotations
- Override Status (note that only the business owner of a KPI will be able to override the status for that KPI)
- Create/Edit KPIs
- Add Scorecard Views To Dashboards

In addition to the scorecard privileges, these privileges might also be required:

- Access to Conditions
- Access To Delivers
- Access to Answers
- Create Agents
- Create Navigate Actions
- Create Invoke Actions
- User Population Can List Users
- User Population Can List Groups
- **Create Conditions**

Privileges are managed by the administrator. For information about privileges, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

To alter the permissions of the Scorecard or elements within it (that is, which users have access to it), you need Full Control permission on the scorecard.

For information about permissions, see Chapter 13, "Managing Objects in the Oracle BI Presentation Catalog."

# Using the Edit and View Modes in the Scorecard Editor

The "Scorecard editor" has two modes:

- **Edit mode** Allows you to create or edit initiatives, perspectives, objectives, KPIs, KPI watchlists, and views, and create agents from KPIs.
- View mode Allows you to navigate and view initiatives, perspectives, objectives, KPIs, KPI watchlists, and views but not add or modify them. You also can add comments, override statuses, and create agents from KPIs.

In addition, the information that you can access and the tasks that you can perform in these mode depends on the following:

- The privileges that are assigned to your account
- The permissions that are associated with the individual scorecard objects and folders

For information on privileges and permissions, see "What Privileges and Permissions Are Required for Scorecards?"

# Creating Scorecards

#### To create a scorecard:

- In the global header, click **New** and then select **Scorecard**. The "New Scorecard dialog" is displayed.
- **2.** Specify a name for the scorecard.
- (optional) Specify a description of the scorecard.
- Select the location in which to save the scorecard.
- Specify whether to use the default Balanced Scorecard perspectives.
- Click **OK**. The new scorecard is created. You can now perform the remaining tasks for creating a scorecard, as described in "How Do I Create a Scorecard?"

# **Opening or Editing Scorecards**

#### To open or edit a scorecard:

- In the global header, click **Catalog** to display the "Catalog page".
- Navigate to the scorecard that you want to open or edit and click one of the following links:
  - **Open** The scorecard is displayed in the "Scorecard editor" in view mode.
  - **Edit** The scorecard is displayed in the "Scorecard editor" in edit mode.

For more information on the view and edit modes, see "Using the Edit and View Modes in the Scorecard Editor".

- **3.** Make the desired changes.
- **4.** Save the scorecard.

### What Are Vision Statements?

A vision statement is a short statement that describes what your organization wants to become sometime in the future. For example, it might be to become the most successful business in the South America Polypropylene Market. (A vision statement is optional.)

Often, from this statement, you define the key goals and priorities that form your mission statement. For more information, see "What Are Mission Statements?"

For information on defining a vision statement, see "Defining Vision Statements".

# **Defining Vision Statements**

#### To define a vision statement:

- Edit the scorecard for which you want to define a vision statement. For information, see "Opening or Editing Scorecards".
- In the "Scorecard Documents pane", click the Create Object toolbar button and then select Vision.

The "Vision tab: Document tab" is displayed.

- Enter and format the vision statement. You can apply such formatting options as bold, italic, underlining, indents, justification, and font size changes.
- **4.** Click the "Vision tab: Details tab".
- Assign the business owner and specify related documents, as appropriate. See "Related Documents area".
- **6.** Click **Save** to display the "Save As dialog". In the Save As dialog, you can rename the vision statement rather than use the default name.

### What Are Mission Statements?

A mission statement specifies the key business goals and priorities that are required to achieve your vision. (A mission statement is optional.)

For information on defining a mission statement, see "Defining Mission Statements".

You define your vision in a vision statement. For more information on vision statements, see "What Are Vision Statements?"

# **Defining Mission Statements**

#### To define a mission statement:

- Edit the scorecard for which you want to define a mission statement. For information, see "Opening or Editing Scorecards".
- In the "Scorecard Documents pane", click the Create Object toolbar button and then select Mission.

The "Mission tab: Document tab" is displayed.

- Enter and format the mission statement. You can apply such formatting options such as bold, italic, underlining, indents, justification, and font size changes.
- **4.** Click the "Mission tab: Details tab".
- Assign the business owner and specify related documents, as appropriate. See "Related Documents area".
- **6.** Click **Save** to display the "Save As dialog". In the Save As dialog, you can rename the mission statement rather than use the default name.

### What Are Perspectives?

Perspectives are categories in your organization with which to associate initiatives, objectives, and KPIs. A perspective can represent a key stakeholder (such as a customer, employee, or shareholder/financial) or a key competency area (such as time, cost, or quality).

You associate an initiative and objective with a perspective when you create or edit it. See "Creating Initiatives" and "Creating Objectives". You associated a KPI with a perspective when you edit the details of the KPI. See "Working with KPI Details".

For example, when you create an objective called Improved Client Response Time you might associate it with the Customer perspective as the objective sustains and supports customer-related operations.

There are four standard perspectives that are defined by the Balanced Scorecard Methodology:

- **Financial** Groups objectives, initiatives, and KPIs that relate to or support the monetary or economic health and development of your organization.
- **Customer** Groups objectives, initiatives, and KPIs that pertain to or support your client base.
- Internal Process Groups objectives, initiatives, and KPIs that categorize and support your corporate internal policies and procedures.
- **Learning and Growth** Groups objectives, initiatives, and KPIs that relate to or support employee training and advancement.

In addition, you can create custom perspectives for your scorecard.

For information on creating custom perspectives, see "Creating Custom Perspectives".

# **Creating Custom Perspectives**

When you create a scorecard, you specify whether you want to use the default perspectives that are defined by the Balanced Scorecard Methodology (using the Use **Default Perspectives?** check box. If you:

- Do not use the default perspectives, then you must create your own custom perspectives.
- Do use the default perspectives, then you can create one or more custom perspectives to use along with the default perspectives.

#### To create custom perspectives:

Edit the scorecard for which you want to create a custom perspective. For information, see "Opening or Editing Scorecards".

- **2.** In the "Perspectives pane", click the **New Perspective** toolbar button. The "Scorecard editor: Perspective tab" is displayed.
- **3.** In the **Perspective Name** field, enter the name of the perspective.
- (optional) In the **Description** field, enter a description of the perspective.
- 5. Click the Set User button to display the "Select Business Owner dialog", where you select the business owner. (By default, the business owner is the creator of the
- **6.** In the **Focus** area, specify whether the focus of the perspective is financial or internal facing.
- **7.** Add related documents, as appropriate. See "Related Documents area".
- **8.** Click **Save**.

The perspective displays in the "Perspectives pane".

You can now associate initiatives, objectives, and KPIs with this custom perspective. You associate an initiative and objective with a perspective when you create or edit the it. See "Creating Initiatives" and "Creating Objectives". You associated a KPI with a perspective when you edit the details of the KPI. See "Working with KPI Details".

# What Are Key Performance Indicators (KPIs)?

A KPI represents the result of a business measure (for example, Product Sales or Operational Costs) evaluated against a target for that measure. You can use KPIs to assess the progress of the objectives and initiatives that form levels of organizational strategy.

You can create KPIs that you need:

- Within a scorecard. This allows you to create the KPIs as you are creating or editing the scorecard.
- Outside a scorecard. This allows you to create the KPIs in advance of creating or editing a scorecard.

For information on KPIs and how to create them, see Chapter 11, "Using KPIs and KPI Watchlists."

### What Are KPI Watchlists?

A KPI watchlist is a set of KPIs whose performance you want to monitor.

You can create KPI watchlists:

- Within a scorecard. You create a KPI watchlist within a scorecard to help you view and investigate the progress of the objectives and initiatives. Watchlists that you create within scorecard are saved as part of the scorecard.
- Outside a scorecard. This allows you to create a KPI watchlist in advance of creating or editing a scorecard. Watchlists that you create outside a scorecard are saved as stand-alone objects in the Oracle BI Presentation Catalog.

For information on KPI watchlists and how to create them, see Chapter 11, "Using KPIs and KPI Watchlists."

### What Are Objectives?

Objectives are the required or desired outcomes that form your corporate strategy. You can create an objective for:

- An entire organization, for example, Oracle Corporation
- A department, for example, Sales department

When you create an objective, you assign it one or more KPIs that are to be used to measure its progress and performance. For example, you can measure the progress and performance of an objective named Improved Customer Satisfaction by assigning it the following KPIs:

- Average Customer Survey Satisfaction Score
- Number of Customer Complaints KPIs

For more information on KPIs, see Chapter 11, "Using KPIs and KPI Watchlists."

Within a scorecard, you also create the initiatives that are required to meet the objectives. For more information on initiatives, see "What Are Initiatives?"

Objectives that you create are displayed hierarchically in the "Strategy pane". The root objective represents the entity that you are scorecarding, that is the entire organization or a department. The KPIs that are assigned to assess the performance of objectives are displayed below the objectives in the Strategy pane.

The Strategy pane also shows the statuses of objectives and KPIs using the appropriate colors and icons that you specified for assessment mappings. For more information on assessment mappings, see "Defining Assessment Mappings for Scorecards".

For information on creating objectives, see Creating Objectives.

### Creating Objectives

You can create one or more objectives. Objectives that you create should be measurable using KPIs and strategically relevant.

For more information about objectives, see "What Are Objectives?"

#### To create an objective:

- Edit the scorecard for which you want to create an objective. For information, see "Opening or Editing Scorecards".
- In the "Strategy pane":
  - If the objective that you want to create can be independently achieved, then select the root objective.
  - If the objective that you want to create is required to meet a higher-level objective, then select the higher-level objective.
- **3.** Click the **Create Objective** toolbar button or right-click and select **Create** Objective.

The "Scorecard editor: Objective Details tab" is displayed.

- 4. Highlight the default objective name in the top left corner and enter a new name for the objective.
- In the **Description** field, enter a description of the objective.

- **6.** Specify the analytic information (including the KPIs to be used to measure the progress and performance of the objective) by completing the "Analytics pane". For information, see "Completing the Analytics Pane for Objectives or Initiatives".
- 7. Specify the collaboration information by completing the "Collaboration pane" as follows:
  - a. (optional) Add comments by clicking the Add Comment button to display the "Add Comment dialog". See "About Comments".
  - **b.** Specify the business owner that users can contact by clicking the **Set User** button to display the "Select Business Owner dialog". (By default, the business owner is the creator of the scorecard.)
  - **c.** (optional) Add related documents by clicking the **New Row** button to display the "New Related Document dialog". Also see "Related Documents area".
- Add related items by completing the "Related Items pane" as follows:
  - **a.** Add one or more objectives that impact or support (that is, help achieve or hinder progress on) this objective. To do so, drag the objective from the Strategy pane and drop it in the **Causes** table.
    - The "Causal Linkage dialog" is displayed, where you specify how closely the objectives are related and whether changes to the values in this causal objective have a direct or inverse impact on this objective.
    - For example, for an Increased Client References objective, you might drag and drop the following objectives that could cause (or help or hinder) it: Decreased Client Response Time and Increase Customer Issue Resolutions.
  - **b.** Add one or more initiatives (that is, the tasks that are required to meet the objective). To add an initiative, drag it from the "Initiatives pane" and drop it in the **Initiatives Driving This Objective** table.
    - The "Initiative Linkage dialog", where you specify how closely the initiative and the objective are related and whether changes to the values in this initiative have a direct or inverse impact on this objective.
  - **c.** Add one or more objectives that this objective impacts or supports. To do so, drag the objective from the Strategy pane and drop it in the **Effects** table.
    - The "Causal Linkage dialog" is displayed, where you specify how closely the objectives are related and whether changes to the values in this causal objective have a direct or inverse impact on this objective.
- 9. Click Save.

### Completing the Analytics Pane for Objectives or Initiatives

When you create an objective or initiative, you must specify the analytics for the objective or initiative by completing the "Analytics pane".

#### To complete the Analytics pane:

- 1. In the **Perspective** box, select the perspective with which the objective or initiative is to be aligned.
- 2. In the Assessment Rule box, select the rule to be used to assess the overall performance of the initiative or objective. For example, select Worst case to specify that the status of the worst performing child KPI or objective is to be used.

- (for an objective only) In the **Leading/Lagging** box, indicate whether the performance of the objective drives other objectives, or is affected by the performance of other objectives or other data or processes.
- **4.** (for an initiative only) In the **Priority** box, select the priority that indicates the importance and urgency of an initiative.
- (for an initiative only) Specify the start date, due date, and completion date.
- In the **Action Link** area, add any action links that you want to provide to users to let them take actions that are relevant for the status of the objective or initiative. For information, see "Adding Actions to Initiatives and Objectives in Scorecards". Also see "What Are Actions?"
- In the **Objectives & KPIs** or **Initiatives & KPIs** table, add the KPIs to be used to measure the progress and performance of the objective or initiative.

Note: If no KPIs have been defined, or you want to define another KPI to meet your needs, then you can create the KPI from within the Scorecard editor. For information, see "Creating or Editing KPIs".

**Tip:** You can modify the columns that are displayed in the Objectives & KPIs or Initiatives & KPIs table. To do so, select View then **Show More Columns** to display the "Show More Columns dialog", where you can add or remove columns.

#### To add a KPI:

a. Click **Objects** in the **Objectives & KPIs** or **Initiatives & KPIs** table and then select Add KPI.

Alternatively, you can drag the KPI from the "Catalog pane for Scorecard" or from the "Scorecard Documents pane" (if the KPI has been saved to the current scorecard folder) and drop it in the table.

The "Add KPI dialog" is displayed.

- If the KPI is dimensioned, then for each dimension, specify a value, select Use Variable and specify the variable, or select **Use Point-of-View** to use the value selected in the point of view area. For more information on the point of view area, see "About the Point of View Area".
- In the **Label** field, enter the name to be displayed for the KPI in the "Strategy pane".
- d. Click OK.

**Note:** A KPI that you have added to the Strategy pane or Initiatives pane obtains many of its properties from the base KPI as it was originally defined in the KPI editor. You can override some of the base KPI's properties to customize them for use within Scorecard. The KPI properties that you can override are the label, description, business owner, and dimension pinnings. You also can assign a perspective and an indicator type. For information on overriding KPI properties, see "Working with KPI Details".

### What Are Initiatives?

Initiatives are time-specific tasks or projects that are necessary to achieve objectives. As such, you can use initiatives that support objectives as milestones as they reflect progress toward strategy targets. For example to implement an objective called Improve Customer Satisfaction, you might create these initiatives:

- Create online feedback forum
- Form response team

When you create an initiative, you assign it KPIs that are to be used to measure its progress. For more information on KPIs, see Chapter 11, "Using KPIs and KPI Watchlists."

Initiatives that you create are displayed hierarchically in the "Initiatives pane". The root initiative represents all the initiatives that you implement to achieve objectives and goals. The KPIs that are assigned to an initiative are displayed below the initiative in the Initiatives pane.

The Initiatives pane also shows the statuses of initiatives and KPIs using the appropriate colors and icons that you specified for assessment mappings. For more information on assessment mappings, see "Defining Assessment Mappings for Scorecards".

For information on creating initiatives, see Creating Initiatives.

# **Creating Initiatives**

You can create one or more initiatives. Initiatives that you create should be measurable using KPIs and strategically relevant.

For more information about initiatives, see "What Are Initiatives?"

#### To create an initiative:

- Edit the scorecard for which you want to create an initiative. For information, see "Opening or Editing Scorecards".
- **2.** In the "Initiatives pane":
  - If the initiative that you want to create can be independently implemented, then select the root initiative.
  - If the initiative that you want to create is required to meet a higher-level initiative, then select the higher-level initiative.
- **3.** Click the **Create Initiative** toolbar button or right-click and select **Create** Initiative.

The "Scorecard editor: Initiative Details tab" is displayed.

- 4. Highlight the default initiative name in the top left corner of the tab and enter a new name for the initiative.
- **5.** In the **Description** field, enter a description of the initiative.
- Specify the analytic information (including the KPIs to be used to measure the progress of the initiative) by completing the "Analytics pane". For information, see "Completing the Analytics Pane for Objectives or Initiatives".
- Specify the collaboration information by completing the "Collaboration pane" as follows:

- (optional) Add comments by clicking the **Add Comment** button to display the "Add Comment dialog". See "About Comments".
- **b.** Specify the business owner that users can contact by clicking the **Set User** button to display the "Select Business Owner dialog". (By default, the business owner is the creator of the scorecard.)
- (optional) Add related documents by clicking the New Row button in the Related Documents toolbar to display the "New Related Document dialog". Also see "Related Documents area".
- **d.** (optional) Add the key resources by clicking the **New Row** button in the Key Resources toolbar to display the "Key Resource dialog".
- In the "Related Items pane", add one or more objectives that require this initiative in order to succeed.

To add an objective, drag the objective from the "Strategy pane" and drop it in the Objectives for this Initiative table.

The "Initiative Linkage dialog" is displayed, where you specify how closely the initiative and the objective are related and whether changes to the values in this initiative have a direct or inverse impact on this objective.

Click Save.

### **Opening Objectives or Initiatives Within Scorecards**

To open an objective or initiative within a scorecard:

- Open or edit the scorecard that contains the objective or initiative. For information, see "Opening or Editing Scorecards".
- 2. Double-click the objective in the "Strategy pane" or the initiative in the "Initiatives pane". The "Scorecard editor: Objective Details tab" or the "Scorecard editor: Initiative Details tab" is displayed.

Alternatively, you can select the initiative or objective and click the **Open** button on the tab toolbar or right-click the initiative or objective and select the **Open** option.

### **Understanding Initiative or Objective Performance Assessment**

Oracle Business Intelligence assesses the performance of an initiative or objective by aggregating the assessments of its children. In the process, it uses:

- Assessment rules (such as Weighted or Best Case) to all objectives and initiatives. You do this when you create an objective or initiative. See "Creating Objectives".
- Weights that you assign to child objectives (but only if the parent objective's assessment rule is set to Weighted) to identify the extent to which each child objective contributes to the overall performance of the parent objective. See "Assigning Weights to Child Objectives, Initiatives and KPIs".
- Weights that you assign to child initiatives (but only if the parent initiative's assessment rule is set to Weighted) to reflect how much each child initiative contributes to the overall performance of the parent initiative. See "Assigning Weights to Child Objectives, Initiatives and KPIs".
- Assessment mappings that you define. See "Defining Assessment Mappings for Scorecards".

# Assigning Weights to Child Objectives, Initiatives and KPIs

You assign weights to the child objectives, initiatives, and KPIs of an objective or initiative to indicate how much it affects the performance of its parent objective.

To assign weights to child objectives, initiatives, and KPIs, the Assessment Rule for the parent objective or initiative must be set to **Weighted**.

For more information on objective and initiative performance assessment, see "Understanding Initiative or Objective Performance Assessment".

#### To assign weights to child objectives, initiatives and KPIs of an objective or initiative:

- Edit the scorecard that contains the parent objective or initiative of the objectives, initiatives, and KPIs to which you want to assign weights. For information, see "Opening or Editing Scorecards".
- Open the parent objective or initiative. To do so, double-click the objective in the in the "Strategy pane" or the initiative in the "Initiatives pane".
- 3. In the Objectives & KPIs or Initiatives and KPIs table of the "Analytics pane", enter a weight for each child objective, initiative, or KPI.

For example, in a root objective called My Company Scorecard, you might assign the following weights to its four child objectives:

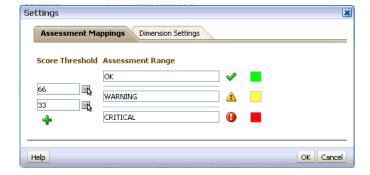
- Improve Financial Results: 70%
- Improve Quality: 10%
- Improve Employee Training: 10%
- Improve Turnaround Time: 10%
- Click Save.

### **Defining Assessment Mappings for Scorecards**

You use the "Settings dialog: Assessment Mappings tab" to define the assessment mappings for a scorecard. Assessment mappings are used to assess performance of objectives and initiatives.

Figure 12–1 shows score thresholds and assessment ranges which specify that, when a score falls between 0 and 33, the performance level is Critical, between 34 and 66, Warning, and between 67 and 100, OK.

Figure 12-1 Example of Assessment Mappings for a Scorecard



For more information on initiative and objective performance assessment, see "Understanding Initiative or Objective Performance Assessment".

#### To define assessment mappings:

- **1.** Edit the scorecard for which you want to define assessment mappings. For information, see "Opening or Editing Scorecards".
- Click the Scorecard Settings toolbar button in the Scorecard editor.
   The "Settings dialog: Assessment Mappings tab" is displayed.
- **3.** In the **Score Threshold** boxes, specify each numerical score (for example, 80) that divides each assessment range.
- **4.** In the **Assessment Range** boxes, specify the name of each assessment range (for example, Acceptable) and, for each range, specify the icon and the color to be used to represent the range.
- 5. Click OK.

### **About the Point of View Area**

The point of view area of the "Scorecard editor" displays controls for the dimensions of KPIs that are used in the Scorecard to measure the progress and performance of initiatives and objectives. For more information on KPI dimensions, see "What Are Dimensions and Pinned Dimension Values?"

Controls are displayed for each KPI dimension that is referenced in a scorecard with the exception of those that you explicitly prevent from being displayed. If the same dimension is referenced in more than one KPI, then a control can be shared by the KPIs. (For more information on how to set up the controls in the point of view area, see "Setting Up the Point of View Controls".)

Each control includes a label and a down-arrow button that displays a list of the dimension values from which you can select. The label is either the database name for the dimension (by default), a user-friendly label, if specified for the control, or a specific value, if the dimension is pinned to a value.

You use this area to temporarily pin (that is, set values) for the dimensions. When you pin a dimension, the data in the scorecard is filtered to give you a new point of view (that is, a new view of the data). This allows you to focus on specific data of interest to you, such as the area of business for which you are responsible.

The point of view area settings are temporary and are not persisted when the scorecard is saved. To persist pinnings, you use the "Settings dialog: Dimension Settings tab", "Dimension Pinnings dialog", "Scorecard editor: KPI Details tab", or "KPI Watchlist editor".

The Scorecard editor also contains the **Back** and **Forward** buttons that allow you to move forward or backward through your point of view history to select a previous point of view or the point of view with which you started.

#### To temporarily pin a dimension:

1. Click the down-arrow button to the right of the dimension and select a value. The data is filtered and a new point of view is displayed.

# **Setting Up the Point of View Controls**

You use the "Settings dialog: Dimension Settings tab" to set up the controls for dimensions in the point of view area of a scorecard.

Specifically, you can specify:

- A default value for the dimension
- Whether a control for the dimension is to be displayed in the point of view area
- The label to be displayed in the point of view area for the dimension

For more information on the point of view, see "About the Point of View Area".

#### To set up the point of view controls:

- Edit the scorecard for which you want to set up the point of view controls. For information, see "Opening or Editing Scorecards".
- Click the **Scorecard Settings** toolbar button in the Scorecard editor.

The "Settings dialog: Assessment Mappings tab" is displayed.

- **3.** Click the Dimension Settings tab.
- **4.** Set up the controls for each dimension as desired. To set up the control for a dimension:
  - **a.** Select the dimension and then click the **Edit Row** button to display the "Edit Dimension Settings dialog".
  - **b.** Specify the settings that you want.
  - c. Click OK.
- 5. Click OK.

### What Are Strategy Trees?

A strategy tree shows an objective and its supporting child objectives and KPIs hierarchically in a tree diagram. It also provides supporting information for the objective, such as business owner and related documents.

A strategy tree lets you easily explore and navigate:

- The strategy for an entire scorecard (that is, the root objective) for example, ABC Corporation
- The strategy for an individual objective, for example, Decrease Support Turnaround.

For information on creating a strategy tree, See "Creating Strategy Trees".

### **Creating Strategy Trees**

You can create a strategy tree for the entire scorecard or for a specific objective as follows:

- In Edit mode, you can create and save a strategy tree for an entire scorecard and for specific objectives.
- In View mode, you can create a temporary, read-only strategy tree only for specific objectives. You cannot save the strategy tree.

For more information about the Edit and View modes, see "Using the Edit and View Modes in the Scorecard Editor".

#### To create a strategy tree:

**1.** If you want to:

- Create and save a strategy tree for an entire scorecard or for a specific objective, edit the scorecard in which you want to create the strategy tree. For information, see "Opening or Editing Scorecards".
- Create but not save a temporary, read-only strategy tree only for a specific objective, open the scorecard. For information, see "Opening or Editing Scorecards".

#### **2.** To create a strategy tree for:

- The entire scorecard (the root objective), in the "Scorecard Documents pane", click the **New Object** toolbar button and select **Create Strategy Tree**.
- For a specific objective, in the "Strategy pane", right-click the objective and then select **View Strategy Tree**.

The "Strategy Tree tab: Diagram tab" is displayed, showing the objective and its supporting child objectives and KPIs hierarchically in a diagram.

#### **3.** To:

- Display options that allow you to work with a node, click the Options button (on the right side of the node) to display the "Node Options Menu"
- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.
- Expand or collapse a node, click the plus (+) or minus (-) icon beneath the node.
- Zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab".
- Work with comments (if any), hover the mouse over the Comment button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".
- Work with status overrides (if any), hover the mouse over the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".
- **4.** Click the "Strategy Tree tab: Details tab".
- **5.** Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)
- **6.** Click **Save** to display the "Save As dialog". In the Save As dialog, you can rename the strategy tree rather than use the default name.

### What Are Strategy Maps?

A strategy map shows how the objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives. It also indicates cause and effect relationships between objectives and other objectives or KPIs with connecting lines. You create cause and effect relationships when you create (or edit) an objective (see "Creating Objectives" or work with KPI details (see "Working with KPI Details". You also can create cause and effect relationships in a strategy map.

You can create multiple strategy maps to represent the strategy of different areas of your organization.

You can create strategy maps in Edit mode only. For more information about the Edit and View modes, see "Using the Edit and View Modes in the Scorecard Editor".

For information on creating strategy maps, see "Creating Strategy Maps".

# Creating Strategy Maps

#### To create a strategy map:

- Edit the scorecard in which you want to create the strategy map. For information, see "Opening or Editing Scorecards".
- In the "Scorecard Documents pane", click the New Object toolbar button and select Create Strategy Map.

The Strategy Map tab: Diagram tab is displayed.

- **3.** Build the map as follows:
  - Add objectives by dragging them from the "Strategy pane" and dropping them in the diagram as follows:
    - If the objective is aligned with a specific perspective, then drop it anywhere in the diagram. It will be displayed automatically in the section for the perspective to which the objective is associated.
      - You align objective with a perspective when you create (or edit) the objective. See "Creating Objectives". For more information on perspectives, see "What Are Perspectives?"
    - If the objective is not associated with a perspective, then you drop it in the section for the perspective to which the objective is to be associated. Note that this will not permanently assign the perspective to this objective.
  - (optional) Add the selected objective's direct cause and effect objectives to the diagram by right-clicking and selecting Add Related Strategy Nodes.
  - Add cause and effect relationships, as needed.

To add a cause and effect relationship, click the **Draw A Casual Linkage** Between Two Objectives button on the Scorecard editor: Strategy Map tab toolbar, select one of the objectives, and then select the second objective. A line connecting the objectives is displayed.

If you want to delete an objective from the map, then right-click the objective and select **Remove From Diagram**.

#### **4.** To:

- Display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu".
- Edit a causal linkage, right-click the linkage line and select Edit Causal **Linkage**. The "Causal Linkage dialog" is displayed.
- Delete a causal linkage, right-click the linkage line and select **Delete Causal** Linkage.
- Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the representation. To collapse this data, click the up arrow.
- Zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Map tab".

- Work with comments (if any), hover the mouse pointer over the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".
- Work with status overrides (if any), hover the mouse pointer over the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".
- **5.** Click the "Strategy Map tab: Details tab".
- Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)
- 7. Click Save to display the "Save As dialog". In the Save As dialog, you can rename the strategy map rather than use the default name.

### What Are Cause & Effect Maps?

A cause & effect map lets you illustrate the cause and effect relationships of an objective. (Note that cause & effect maps are diagrams that are used in scorecard and are not related to map views that are described in Chapter 3, "Adding Views for Display in Dashboards.")

You create cause and effect relationships for an objective when you create or edit the objective and identify:

- Other objectives that impact or support the objective (causes)
- Other objectives that this objective impacts or supports (effects)

A cause and effect map also indicates the proportionality (that is, whether changes in performance or value in the cause and effect relationship are directly proportional (direct) or inversely proportional (inverse) and strength (strong, moderate, or weak) of cause & effect relationships using symbols.

A cause & effect map helps you to better understand the implications of future strategic changes.

You can create a cause & effect map in either Edit or View mode:

- In Edit mode, you can create and save a cause & effect map.
- In View mode, you can create a temporary, read-only cause & effect map. You cannot save it.

For more information about the Edit and View modes, see "Using the Edit and View Modes in the Scorecard Editor".

For information on creating cause & effect maps, see "Creating Cause & Effect Maps".

# **Creating Cause & Effect Maps**

To create a cause & effect map:

- **1.** If you want to:
  - Create and save a cause & effect map for an objective, edit the scorecard in which you want to create the cause & effect map. For information, see "Opening or Editing Scorecards".

- Create but not save a temporary, read-only cause & effect map for an objective, open the scorecard. For information, see "Opening or Editing Scorecards".
- 2. In the "Strategy pane", right-click the objective and then select View Cause & Effect Map.

The "Cause & Effect Map tab: Diagram tab" is displayed.

- - Display options that allow you to work with a node, right-click the node or click the **Options** button (on the right side of the node) to display the "Node Options Menu".
  - Display additional performance data for a KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.
  - Edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.
  - Delete a causal linkage, right-click the linkage line and select **Delete Causal** Linkage.
  - Zoom in and out of the diagram or to set preferences, use the toolbar buttons on the "Scorecard editor: Cause & Effect Map tab".
  - Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".
  - Work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".
- **4.** To specify how cause and effect relationships are to be displayed on the cause & effect map, click the Cause & Effect Map Preferences toolbar button on the Scorecard editor: Cause & Effect Map tab.

The Cause & Effect Map Preferences dialog: General tab is displayed.

- **5.** Specify how you want cause and effect relationships displayed and then click **OK**.
- **6.** Click the Cause & Effect Map tab: Details tab.
- 7. Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)
- Click Save to display the "Save As dialog". In the Save As dialog, you can rename the cause & effect map rather than use the default name.

### What Are Custom Views?

A custom view lets you show a customized view of your business and strategy data. For example, you might present information about objectives and KPIs on a background image of your choice, such as your company logo.

You can create custom views in Edit mode only. For more information about the Edit and View modes, see "Using the Edit and View Modes in the Scorecard Editor".

For information on creating custom views, see "Creating Custom Views".

# **Creating Custom Views**

#### To create a custom view:

- Edit the scorecard in which you want to create the custom view. For information, see "Opening or Editing Scorecards".
- In the "Scorecard Documents pane", click the New Object toolbar button and select Create Custom View.
  - The Custom View tab: Diagram tab is displayed.
- **3.** Drag objectives and KPIs from the "Strategy pane" and drop them on the diagram.
- **4.** Specify how you want each objective or KPI to be displayed on the diagram. For each objective or KPI, select it on the diagram and specify whether you want it displayed as:
  - Its full version. To do so, click the **Full** toolbar button.
  - Its simple version. To do so, click the **Simple** toolbar button.
  - One of its properties. To do so, click the *Property* toolbar button and select the property.
- 5. Specify the background image by clicking the **Properties** toolbar button to display the "Custom View Properties dialog", where you specify the image to use.
- To:
  - Display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu".
  - Display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.
  - Zoom in and zoom out of the diagram, use the toolbar buttons on the "Scorecard editor: Custom View tab".
  - Work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".
  - Work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".
- **7.** Click the Custom View tab: Details tab.
- Specify a description, assign the business owner, and specify related documents, as appropriate. (By default, the business owner is the creator of the scorecard.)
- Click Save to display the "Save As dialog". In the Save As dialog, you can rename the cause & effect map rather than use the default name.

# Working with KPI Details

When you create initiatives and objectives, you can assign KPIs to them to measure their progress and performance. You can work with these KPIs within a Scorecard using the "Scorecard editor: KPI Details tab".

Specifically, you can:

- View basic KPI settings as well as a graph that presents actual values and target
- Override the label, description, and business owner that are defined for the KPI.
- Pin dimensions. For more information on KPI dimensions and dimension pinning, see "What Are Dimensions and Pinned Dimension Values?"
- View documents that provide supporting information to the KPI.
- Run actions that are associated with the KPI.
- Associate the KPI with a perspective.
- Specify an indicator type (for example, Leading) to indicate whether the performance of the KPI drives other KPIs, or is affected by the performance of other KPIs, or other data or processes.
- View, add, or reply to comments.
- Identify objectives that cause or effect the KPI.

#### To work with KPI details:

- 1. Edit the scorecard that contains the KPI. For information, see "Opening or Editing Scorecards".
- If the KPI is assigned to an:
  - Initiative, double-click the KPI in the "Initiatives pane"
  - Objective, double-click the KPI in the "Strategy pane"

The Scorecard editor: KPI Details tab is displayed.

- Perform any of the following tasks:
  - Override one of the following items:
    - Label, using the *Label* field
    - Description, using the **Description** field
    - Business Owner, using the Business Owner field in the "Collaboration pane"
  - Pin dimensions using the **Dimensionality** area in the "Analytics pane".
  - Run actions that are associated with the KPI, using the action links in the **Actions** area of the Analytics pane.
  - Associate the KPI with a perspective, using the **Perspective** field in the Analytics pane.
  - Specify the indicator type, using the **Indicator Type** field in the Analytics pane.
  - View, add, or reply to comments, using the Collaboration pane. For more information on comments, see "About Comments".
  - View documents that provide supporting information to the KPI, using the **Related Documents** area in the Collaboration pane.
  - Identify objectives that cause or effect the KPI, using the "Related Items pane".
- If you made any changes, then click **Save**.

# **Viewing Overview Information**

You can view summary information for initiatives, objectives, or KPIs.

#### To view overview information:

Open or edit the scorecard. For information, see "Opening or Editing Scorecards".

The "Scorecard editor: Overview tab" is displayed. It shows summary information for the root objective, which represents the entity that you are scorecarding, that is, the entire organization or a department.

- To show summary information for:
  - A KPI, in the "Initiatives pane" or in the "Strategy pane", click the KPI.
  - An initiative, in the "Initiatives pane", click the initiative.
  - An objective, in the "Strategy pane", click the objective.

# **Editing Scorecard Objects**

You can edit scorecard objects in the "Scorecard editor".

(You also can edit scorecard objects from the "Catalog page". For information, see "Managing Objects in the Oracle BI Presentation Catalog".)

#### To edit a scorecard object in the Scorecard editor:

- Edit the scorecard that contains the scorecard object that you want to edit. For information, see "Opening or Editing Scorecards".
- Double-click the object. For example, to edit an objective, double-click it in the "Strategy pane", or, to edit a strategy map, double-click it in the Scorecard Documents pane.

Note, for a strategy tree, you can edit only the details of a strategy tree, not the diagram.

- **3.** Make your changes.
- Click Save.

### **Deleting Scorecard Objects**

You can delete scorecard objects from the "Scorecard editor".

(You also can delete scorecard objects from the "Catalog page". For information, see "Managing Objects in the Oracle BI Presentation Catalog".)

**Caution:** Before deleting an initiative, ensure that it has been completed or is no longer required to achieve an objective. Before deleting an objective, examine any child objectives or other objectives with which it is linked to ensure that its removal will not negatively impact these objectives.

#### To delete a scorecard object from the Scorecard editor:

Edit the scorecard that contains the scorecard object that you want to delete. For information, see "Opening or Editing Scorecards".

- 2. Right-click the object and select **Delete**. For example, to delete a Strategy Map, right-click it in the "Scorecard Documents pane" and select **Delete**.
- **3.** In the confirmation dialog, confirm that you want to delete the object.

### Adding Scorecard Objects to Dashboards

You can add the following scorecard objects to dashboards:

- Cause & effect maps. See "What Are Cause & Effect Maps?"
- Custom views. See "What Are Custom Views?"
- Strategy maps. See "What Are Strategy Maps?"
- Strategy trees. See "What Are Strategy Trees?"
- KPI watchlists. See "What Are KPI Watchlists?"

For information on adding a scorecard object to a dashboard, see Adding Content to Dashboards.

### **About Status Overrides**

You can override the statuses of initiatives, objectives, or KPIs that measure the performance of initiatives and objectives. To override a status, you must be the business owner of the initiative, objective, or KPI.

> **Note:** Before you can work with status overrides, your administrator must enable this feature. For more information, see "Enabling Comments and Status Overrides in Oracle Scorecard and Strategy Management" in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

Status overrides are associated with a specific point of view. That is, they are filtered by the values in the point of view area in the "Scorecard editor" that are currently in effect for the object being viewed. As a result, the override for Eastern Region Sales can be different than the override for Western Region Sales. (For more information on the point of view, see "About the Point of View Area".

A specific override will be displayed in all Scorecard or watchlist views when the same object is viewed for the same unique set of dimension values.

For information on overriding statuses of initiatives, objectives, and KPIs, see "Overriding the Statuses of Initiatives, Objectives, and KPIs".

# Overriding the Statuses of Initiatives, Objectives, and KPIs

You can override the statuses of initiatives, objectives, or KPIs that measure the performance of initiatives and objectives. For more information about status overrides, see "About Status Overrides".

#### To override a status of an initiative, objective, or KPI:

- Open the scorecard that contains the initiative, objective, or KPI whose status you want to override. For information, see "Opening or Editing Scorecards".
- **2.** Display the appropriate Details tab as follows:

- For an initiative or a KPI that measures the progress of the initiative, double-click the *parent* initiative in the "Initiatives pane". The "Scorecard editor: Initiative Details tab" is displayed.
- For an objective or a KPI that measures the progress of the objective, double-click the *parent* objective in the "Strategy pane". The "Scorecard editor: Objective Details tab" is displayed.

You can also display the appropriate Details tab from a view diagram (for example, the "Strategy Map tab: Diagram tab" by selecting **Open** from the "Node Options Menu" of the parent objective or initiative.

- **3.** In the **Initiatives & KPIs** or **Objectives & KPIs** table in the "Analytics pane", right-click in the cell in the **Status** column for the initiative, objective, or KPI and select **Override Status**. The "Status Override dialog" is displayed.
- **4.** In the **New Status** box, select a new status.
- **5.** In the **Reason** box, enter the reason for the override.
- 6. Click OK.

### **Contacting Business Owners**

You can send a message to the business owner of a scorecard object. The business owner is the person who is responsible for managing and improving the business value and performance of a scorecard object. (The business owner might or might not be the same as the person who creates the scorecard or creates the KPI.) You specify the business owner of an object when you create it.

You use the **Contact Owner** button or menu option to contact the business owner. This button is available in many places in a scorecard, for example, in the toolbar of most tabs, such as the "Scorecard editor: Objective Details tab".

Oracle BI EE uses an agent and the delivery devices and profiles that the business owner specified in the "My Account dialog: Delivery Options tab" to determine where to deliver the message (for example, e-mail, phone, or pager).

#### To contact a business owner:

- 1. Click the **Contact Owner** button or menu option. The "Contact Owner dialog" is displayed.
- **2.** In the **Subject** field, enter a the subject of the message.
- **3.** In the **Priority** field, select the priority of the message.
- **4.** In the **Message** field, enter the message that you want to send to the business owner.
- 5. Click Send.

### About Comments

Comments (also known as annotations) allow you to discuss changes in performance and progress for an initiative, objective, or KPI for a specific set of dimension values (that is, for a specific point of view).

**Note:** Before you can work with comments, your administrator must enable this feature. For more information, see "Enabling Comments and Status Overrides in Oracle Scorecard and Strategy Management" in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

#### Comments are associated with:

A certain column.

A comment is normally associated with the Status column of an objective, initiative, or KPI, unless (for KPIs only) the comment is added to another column such as Trend or Variance.

- A specific point of view. That is, they are filtered by the values in the point of view area in the "Scorecard editor" that are currently in effect for the object being viewed. As a result, the comment for Eastern Region Sales can be different than the comment for Western Region Sales. (For more information on the point of view, see "About the Point of View Area".
- Any dimension pinnings on the KPI.

Comments are filtered by any other dimension pinnings which are in effect (on a KPI, scorecard, scorecard diagram, dashboard prompt, or KPI Watchlist).

A specific comment will be displayed in all Scorecard or watchlist views when the same object is viewed for the same unique set of dimension values.

#### You can:

Add comments to initiatives, objectives, and KPIs that measure the progress of initiatives and objectives. See "Adding Comments to Initiatives, Objectives, and KPIs".

**Note:** Before you can comments to an initiative or objective, the initiative or objective must have at least one KPI assigned to it.

- Reply to comments that are attached to initiatives, objectives, and KPIs. See "Replying to Comments Attached to Initiatives, Objectives, and KPIs".
- Display the comments that are attached to initiatives, objectives, and KPIs in views (such as strategy maps). See "Displaying Comments in Views".

Options and buttons to work with comments are available in many places in scorecard, for example, the New Comment button in the "Collaboration pane" or the **Comment** button in the "Strategy Tree tab: Diagram tab".

### Adding Comments to Initiatives, Objectives, and KPIs

You can add comments to initiatives, objectives, and KPIs that measure the progress of initiatives and objectives. For more information on comments, see "About Comments".

#### To add a comment to an initiative, objective, or KPI:

- 1. Open or edit the scorecard that contains the initiative, objective, or KPI to which you want to add a comment. For information, see "Opening or Editing
- **2.** Display the appropriate details tab as follows:

- For an initiative, double-click the initiative in the "Initiatives pane". The "Scorecard editor: Initiative Details tab" is displayed.
- For an objective, double-click the objective in the "Strategy pane". The "Scorecard editor: Objective Details tab" is displayed.
- For a KPI that measures the progress of an initiative, double-click the KPI in the "Initiatives pane". The "Scorecard editor: KPI Details tab" is displayed.
- For a KPI that measures the progress of an objective, double-click the KPI in the "Strategy pane". The "Scorecard editor: KPI Details tab" is displayed.
- **3.** Ensure that the values that are displayed in the point of view area reflect the desired context for the comment. (For example, you might want to comment on a KPI status for the Eastern region.)
- **4.** In the "Collaboration pane", click the **New Comment** button. The "New Comment dialog" is displayed.
  - Comments added by clicking the **New Comment** button will be associated with the status (that is, the Status column) of the objective, initiative, or KPI.
  - For KPIs only, you can also associate a comment with other columns such as Trend, Target, or Variance. To do so, edit the parent object, right click on the relevant cell in the "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table" and select **Add Comment**.
- **5.** Enter the subject of your comment and your comment.
- **6.** Click **OK**.

# Replying to Comments Attached to Initiatives, Objectives, and KPIs

You can reply to comments that are attached to initiatives, objectives, and KPIs. For more information on comments, see "About Comments".

#### To reply to a comment attached to an initiative, objective, or KPI:

- Open or edit the scorecard that contains the initiative, objective, or KPI to which to which the comment is attached. For information, see "Opening or Editing Scorecards".
- **2.** Display the appropriate details tab as follows:
  - For an initiative, double-click the initiative in the "Initiatives pane". The "Scorecard editor: Initiative Details tab" is displayed.
  - For an objective, double-click the objective in the "Strategy pane". The "Scorecard editor: Objective Details tab" is displayed.
  - For a KPI that measures the progress of an initiative, double-click the KPI in the "Initiatives pane". The "Scorecard editor: KPI Details tab" is displayed.
  - For a KPI that measures the progress of an objective, double-click the KPI in the "Strategy pane". The "Scorecard editor: KPI Details tab" is displayed.
- **3.** In the "Collaboration pane", locate the comment to which you want to reply and click the **Reply** link. The "Reply dialog" is displayed.
- **4.** In the **Comment** box, enter your reply.
- 5. Click OK.

# **Displaying Comments in Views**

You can display the comments that are attached to initiatives, objectives, and KPIs in views (such as strategy maps). For more information on comments, see "About Comments".

#### To display comments in views:

- Open the view in the Scorecard editor or open the dashboard page that contains the view.
- **2.** Hover the mouse pointer over the **Comment** icon in the upper-right corner of an initiative, objective, or KPI.

The "Status window" is displayed with all the comments that are attached to the initiative, objective or KPI. From this window, you can:

- Read all comments.
- Add a new comment by clicking **New Comment**.
- Reply to a comment by clicking the **Reply** link.
- Pin the window so that it stays open by clicking the **Pin** button.

# **Managing Objects in the Oracle Bl Presentation Catalog**

This chapter provides information about using the Oracle BI Presentation Catalog to store and managing business intelligence objects. It contains the following topics:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Saving Business Intelligence Objects"
- "How Can I Search for Objects?"
- "Searching with the Basic Search"
- "What Results are Returned from a Full-Text Catalog Search?"
- "Making the Full-Text Catalog Search Available to End Users"
- "Searching Using Full-Text Catalog Search"
- "Object-Specific Tasks"
- "Exporting Reports, KPIs, and Analysis Prompts Data"
- "Accessing Properties"
- "Levels of Oracle BI EE Security"
- "What Are Permissions?"
- "How Are an Object's Permission Assigned?"
- "Access Control Lists and Permissions"
- "Permission Definitions"
- "Permissions Available by Object Type"
- "Recommendations for Setting Permissions"
- "Assigning Permissions"
- "Assigning Ownership of Objects"
- "What is Archiving?"
- "Archiving Objects"

# What is the Oracle BI Presentation Catalog?

The Oracle BI Presentation Catalog (the catalog) stores business intelligence objects and provides an interface where users create, access, and manage objects, and perform specific object-based tasks (for example, export, print, and edit). The catalog is organized into folders that are either shared or personal.

If Oracle BI EE is integrated with other Oracle applications, then the objects that are created within those applications are also stored within the catalog. For example, if Oracle BI Publisher is integrated with Oracle BI EE, data models, reports, and style templates and sub-templates are also stored in and accessible from the catalog.

Many of the operations that you can perform in the Oracle BI Presentation Catalog can also be performed in the Catalog Manager, which resides outside of Oracle BI Presentation Services. For more information about the Catalog Manager, see *Oracle* Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

# Who Uses the Catalog?

Within Oracle BI EE, there are three primary users: content consumers, content designers, and catalog administrators. Each user performs different tasks within the catalog, and, therefore, each user sees a different version of the catalog interface. Functionality that is available for one user might not be available for another. Furthermore, the catalog functionality and objects that are available to a user depend upon the privileges that are specified by the Presentation Services Administrator and the object's individual permissions, which are usually set by the content designer.

Content consumers can use the Catalog page to view the business intelligence objects that are necessary to perform their day-to-day tasks. For example, a sales manager needs to access an analysis that monitors the weekly sales of a specific brand of beverage in the Central and Eastern regions. The permissions that are set by the content designer and catalog administrator determine what tasks the content consumers can perform both on an individual piece of content and within the catalog. For example, content consumers at Company A can search for, view, and interact with only those objects that have been assigned to them, but content consumers at Company B can search for and interact with content as well as create content and store it to their personal folders.

Content designers are the individuals who create the content for the content consumers. Content designers need broader access to the catalog in order to efficiently create, edit, test, and troubleshoot objects. Their access to the catalog's functionality is more comprehensive than that of the content consumers. However, like the content consumer, the content designer's permissions are set by the administrator. For example, a content designer needs to store content in and retrieve content from the public folders for the Sales functional area, but not the Operations functional area. Or a content designer needs to be assigned to several groups so that the content designer can log into Presentation Services as different users to test the new or revised content.

Administrators need the most comprehensive access to the catalog; however, their access is still determined by the privileges that are assigned to their role by the Presentation Services administrator. In general, the catalog tasks that the administrator performs include setting permissions on catalog objects and folders, archiving the catalog, creating and managing directory structures, and managing system and user data.

# **Saving Business Intelligence Objects**

Use the following procedure to save objects to the catalog:

#### To save an object to the catalog:

- Create or edit a business intelligence object and click Save or Save As from the editor's toolbar. The Save As dialog is displayed.
- Select the catalog location to which you want to save the object. Note the following
  - You can create sub-folders for storage within your My Folders folder or within the system folder for which you have the permissions to modify.
  - Oracle BI EE allows you to save any type of business intelligence object to any location within the catalog. However, for some object types, Oracle BI EE's Save As dialog suggests the best catalog location. For example, if you are creating a named filter, then it should be saved to a subject area folder (/My Folders/Subject Area Contents/Paint) so that it is available when you create an analysis using the same subject area and to which you want to add the saved filter.
  - You can save the following objects to any location within the catalog: actions, agents, analyses, BI Publisher objects, briefing books, conditions, KPIs, and prompts.
  - Oracle recommends that you save the following objects to the subject area folder: calculated items, custom groups, and filters. If a subject area folder does not exist in your /My Folders folder or within the /Shared Folders folder, then Oracle BI EE creates a subject area folder and the Save As dialog will default a save path to /My Folders/Subject Area Contents/<subject area>. Saving these objects to the subject area folders ensures that they will be available when you build an analysis for the same subject area.
  - Dashboards can be saved to any catalog location. However, if you want the dashboard to display in the global header's Dashboards menu, then you must save the dashboard to a first level dashboard folder. For example, save the dashboard to the following location to *include* the dashboard in the Dashboard menu: /Shared Folders/Sales Projections/Dashboards. Save the dashboard to the following location to exclude the dashboard from the Dashboard menu: /Shared Folders/Sales Projections/Dashboards/Design Time. For more information about saving dashboards, see "Saving Dashboards By Other Names and In Other Locations".

#### 3. Click OK.

Use the following procedure to create a sub-folder within your My Folders or, if you have the required permissions, to create a sub-folder.

#### To create a folder or sub-folder:

- On the "Catalog page", go to the desired location in the "Folders pane".
- In the catalog toolbar, click **New** and select **Folder**. The New Folder dialog is displayed.
- Enter the folder name and click **OK**.

# **How Can I Search for Objects?**

You can use either the basic catalog search or the full-text catalog search to find objects in the Oracle BI Presentation Catalog.

### **Basic Catalog Search**

The basic catalog search allows you to access objects from the global header and the Home page, or to quickly find objects through the Catalog page. In the Catalog page, you can search for an object by its name, location, or type, only, which is similar to using a Find dialog in many products. You will find only those objects for which you have the appropriate permissions. When the desired object is located, you can click it to display it for viewing or editing, as your permissions allow.

### Full-Text Catalog Search

The full-text catalog search allows you to search for an object using Oracle BI Search, which is similar to a full-text search engine. How you access the full-text catalog search depends upon how your administrator has made it available to you (for example, your administrator might have provided you with a URL to the full-text catalog search).

You can search for objects by various attributes, such as name and description. You will find only those objects for which you have the appropriate permissions. When the search is initiated and the desired object is located, you can click it to display it for viewing. For more information about permissions, see "What Results are Returned from a Full-Text Catalog Search?"

You can search for nearly all types of objects in the Oracle BI Presentation Catalog, with a few exceptions such as Marketing Segmentation objects. You can also search for attachments to objects, such as a PDF file that is contained on a dashboard page. You can search for objects such as dashboard prompts that are saved within other objects.

### Searching with the Basic Search

You can use the basic search to quickly find an object within the catalog. You can access objects by type from the global header, locate objects through the search shortcuts located on the Home page, or conduct a formal search for objects from the Catalog page. For more information, see "How Can I Search for Objects?"

#### To access objects from the global header:

Use the global header to quickly access objects by type and name from anywhere in Presentation Services. Go to the global header and perform one of the following

- In the **Search** field, click the down arrow and select the object type for which you want to search. Place your cursor in the field next to the **Search** field and enter part or all of the object's name. Click the arrow button to begin the search. The Catalog page is displayed with the results that match your search criteria. For more information about how to search, see "Search pane".
- Click the **Dashboards** link and select a specific dashboard. Only the dashboards that were saved in first level dashboard folders will display in the Dashboards link.

Any hidden dashboards from a previous version of Oracle BI EE will not display in the Dashboards link in the global header. During the migration of the catalog, the Hidden attribute was applied to the child folders that contain the hidden

- dashboards. To view these hidden dashboards in the Catalog page or to search for them from the Catalog page, check the Show Hidden Items box.
- Click the **Open** link and select a specific object. This list is populates with the most recently opened objects to which you have access. This list also includes the objects to which you have access that have been opened most frequently. The objects that are displayed in the Open list were opened by you or any other individual user or member of a group who has privileges to open them.

#### To access objects through search shortcuts:

Use the Browse/Manage... pane located on the Home page to perform quick searches by object type, or to access the Catalog page. Go to the Home page and perform one of the following actions.

- In the Browse/Manage.... pane, click the folder/binocular button corresponding to the object that you want to search. When you click one of these buttons, Oracle BI EE searches your My Folders location for the specified object type. For example, click My Scorecards folder/binocular button to access a list of all of the Scorecard objects located in your My Folders location. After you click a folder/binocular button, the Catalog page displays and contains the results of your search, as well as default the pre-defined search's criteria into the Search fields
- The All Content link is actually two links. Click Browse Oracle BI Presentation Catalog to access the Catalog Page showing the Folders pane. From this pane you can expand folders to browse for a specific object. Click the Search Oracle BI Presentation Catalog to access the Catalog Page showing the Search Pane where you can specify your search criteria.

Use the Catalog page's functionality to provide search criteria. This searching method is useful when you know the object's name, location, or type.

#### To search the catalog from the Catalog page:

- In the global header, click **Catalog**. The "Catalog page" is displayed.
- Click the binoculars button to display the Search pane.
- **3.** In the "Search pane", specify the search criteria. Consider the following options:
  - Name: All objects and folders whose names contain the letters that you enter will be displayed. For more information about how to search, see "Search pane".
  - Location: Select the folders to search. Administrators and users with administrative permissions can search the catalog root folder. However, before you can search the root folder, you must be in Admin View.
  - Type: Select the kind of object for which you are searching (for example, KPI, Scorecard, or Filter).

**Note:** To search for Hidden Items, you must select the **Show Hidden Items** box, which is located on the Catalog Page's header.

#### 4. Click Search.

Folders or objects that satisfy the search criteria are displayed.

# What Results are Returned from a Full-Text Catalog Search?

When you use the full-text catalog search, it locates those objects that have been crawled and indexed and for which you have the appropriate permissions. If you want to prohibit an object from being indexed, then make the appropriate setting in the object's "Properties dialog".

When you initiate a full-text catalog search, you see a window that displays the results of the search. The list of results includes any objects that match the criteria, for which you have at least the "Open" permission. If an object is stored in a folder, then you must have the "Traverse" folder and "Open" object permissions. Note that objects with the "No Access" permission will not be available. The string that you are searching for is displayed in a highlighted manner, such as bold font or a colored background.

In some cases, you might not see the string in the list of results. This happens when the string is used by the object but is not part of its object name or path name. The string is included in the definition of an object, such as in the columns that are specified as part of the analysis.

For example, suppose that the Oracle BI Presentation Catalog contains an analysis that uses a dashboard prompt that accepts Central Region as a value. Suppose you search for "Central" with the full-text catalog search. The returned list will include the analysis that uses the prompt that accepts Central Region as a value. If you click that analysis in the list, then you see that analysis open so that it is filtered by Central Region via the prompt, because that is what you searched for.

# Making the Full-Text Catalog Search Available to End Users

The content designer or administrator can make the full-text catalog search available to users via the following means:

- The content designer or administrator can provide users with the URL for the full-text catalog search page so that they can bookmark it and display it in a browser.
- The content designer can embed the URL in a link on a dashboard page. For example, on a dashboard page, the content designer can add an action link that allows users to navigate to the full-text catalog search's URL. For information, see Chapter 10, "Working with Actions."
- The administrator can configure Oracle BI EE to display the **Secure Enterprise Search for Oracle BI** link in the Home page. When configured, this link displays in the Browse/Manage... pane's All Contents list. The user clicks this link to access the full-text catalog search page. For information about configuring Oracle BI EE to display this link, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

# Searching Using Full-Text Catalog Search

You can use the full-text catalog search, which uses a search page that displays in a separate browser window, to perform an in-depth search for a business intelligence object. For more information, see "How Can I Search for Objects?" and "What Results are Returned from a Full-Text Catalog Search?"

#### To search using the full-text catalog search:

Use the following procedure to search for objects.

1. Display the search page by clicking the **Secure Enterprise Search for Oracle BI** menu on the Oracle BI EE Home page, if one is available.

Otherwise, in a new browser window, enter the URL for the Oracle Secure Enterprise Search page. If you are unsure of the URL, then contact the administrator.

2. Click Login and enter your login information for Oracle BI EE.

You must log in to see search results of those objects that you have permission to see. If you do not log in, then you are likely to see nothing in the search results, because it is likely that no objects in the catalog are visible to unnamed users.

**3.** In the box, enter the text for which you want to search.

For example, if you want to find analyses that include the Sales measure column, then enter sales in the box.

Note that above the box are a list of links the provide groups that can help limit the search results.

4. Click Search.

### **Object-Specific Tasks**

The tasks that you can perform for an object that you select from the "Catalog pane" are determined by both the selected object's type (for example, a dashboard or KPI) and the permissions that were set for the object. The list of available tasks is displayed in the "Tasks pane", which is located within the "Catalog page" or from the object's More link.

Figure 13–1 shows the available tasks for the analysis that was selected from the catalog. This graphic illustrates that the tasks that the user can perform for the selected analysis are: Open, Edit, Print, Export, Create Agent, Add to Briefing Book, Delete, Copy, Rename, Create Shortcut, Properties, and Permissions.

Figure 13-1 Tasks Pane within the Catalog Page



In most cases, you can open or copy an object. However, if you selected an analysis, then you can create an agent for the analysis or export the analysis. If you selected a dashboard, then you can publish the dashboard or archive it, depending upon the permissions that were assigned to the object.

### **Exporting Reports, KPIs, and Analysis Prompts Data**

To leverage your data and use it in other applications, you can export report, KPI, and analysis prompt values and data as a PDF, MHTML, XLS, and CVS file.

#### To export data:

- 1. In the global header, click **Catalog**. The "Catalog page" is displayed.
- Search for the object that you want to export. For more information about searching, see "Searching with the Basic Search".
- **3.** In the "Folders pane", select the object to export.
- **4.** Select the object and perform a task:
  - Below the document, select **More** and then **Export**
  - Select the **Export** button in the "Tasks pane".
- Select the format. Note that the **Data** list contains the **CSV Format**, **Tab delimited Format**, and **XML Format** options.

# **Accessing Properties**

Administrative users can access the properties of any object or folder to perform tasks such as view system information or change access levels. Users can access and modify the properties of the objects that they create or own.

#### To access properties:

- In the global header, click **Catalog**. The "Catalog page" is displayed.
- Search for the object to which you want to assign properties. For more information about searching, see "Searching with the Basic Search".
- In the "Folders pane", select an object or folder.
- **4.** Perform a task:
  - Below the document, select **More** and then **Properties**
  - Click the **Properties** button in the "Tasks pane".
- **5.** Review or change the settings displayed in the "Properties dialog".

### Levels of Oracle BI EE Security

Oracle BI EE supports security mechanisms that allow users to access only the data for which they are authorized. For specific information about setting up and maintaining security, see Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition. The following types of security are typical:

- Business logic object security. This security mechanism controls access to objects, such as subject areas, folders, and columns. For example, content designers in a particular department can view only the subject areas that belong to their department when using the Analysis editor.
- Catalog object security. This security mechanism provides security for objects that are stored in the Oracle BI Presentation Catalog, such as dashboards, dashboard pages, folders, and analyses. Users can view only the objects for which they are authorized. For example, a mid-level manager might not be granted access to a dashboard that contains summary information for an entire department. For more information about catalog object security, see "What Are Permissions?"

**Data level security.** This security mechanism controls the type and amount of data that is available in analyses. When multiple users run the same analysis, the results that are returned to each user depend on their access rights and roles in the company. For example, a sales vice president sees results for all regions, while a sales representative for a particular region sees only data for that region.

The security mechanisms in Oracle Business Intelligence can use security hierarchies that are defined in operational applications, such as Siebel CRM applications, which minimizes the need for administrators to manage multiple security systems. The security mechanisms also allow a high degree of control over access to elements in Oracle Business Intelligence applications.

### What Are Permissions?

An object's owner or a user who has been given the proper privileges and permissions can assign permissions to catalog objects. Permissions are authorizations that you grant to a user or role to perform a specific action or group of actions on a catalog object. For example, if you work in the sales department and created a dashboard that contains quarterly sales projections, then you can give read access to this dashboard to all sales people, but give read, write, and delete access to sales directors and vice presidents.

Permissions are a part of the Oracle BI EE security model, and how permissions are initially assigned is based on how users, roles, and groups were set up on your system, and which privileges the Oracle BI EE administrator granted those users, roles, and groups. For example, the administrator removes the BIAdministrator role from the Admin:Catalog, Change Permissions privilege. This means that no one included in the BIAdministrator group can change permissions for any catalog objects other than the objects that the individual users who are included in the BIAdministrator group create or own.

### How Are an Object's Permission Assigned?

The permissions for a folder, Oracle BI Publisher object, or other objects are assigned by either the object owner, the content designer, or the catalog's administrator. Before someone other than the content designer can assign permissions to an object, that person must have been given ownership of the object, granted the Change Permissions privilege by the Presentation Services administrator, and have been given the Change Permissions object permission, which is listed in the "Custom Permissions dialog". For more information about setting the Change Permissions privileges, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

When the content designer creates an object and saves it to a folder, the object will inherit the permissions that are set on the folder. After the object is saved, the content designer can display either the catalog's "Tasks pane" or the object's More... link, locate the object, access the "Permission dialog", and modify the object's permissions. If the object's Read-Only property, which is set on the "Properties dialog", is selected, then no one other than the owner can modify the object's permissions. This read-only setting essentially trumps any permissions that are set in the Permission dialog.

When working with an object, you use the Permissions dialog to assign who gets which object permissions in the following ways:

**To application roles** — This is the recommended way of assigning permissions. Application roles provide much easier maintenance of users and their assignments. An application role defines a set of permissions granted to a user or group that has that role in the system's identity store. An application role is assigned in accordance with specific conditions. As such, application roles are granted dynamically based on the conditions present at the time authentication occurs.

For information on application roles, see Oracle Fusion Middleware Security Guide for *Oracle Business Intelligence Enterprise Edition.* 

- To individual users You can assign permissions and privileges to specific users, but such assignments can be more difficult to maintain and so this approach is not recommended.
- **To Catalog groups** This approach is maintained for backward compatibility with previous releases only. For information about catalog groups, see "Working with Catalog Groups" in the Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

### **Access Control Lists and Permissions**

Access control lists define the ability of an account to access a shared object in the Oracle BI Presentation Catalog. An account is an application role, a Catalog group, or an individual user. Permissions describe the type of access to an object that an account is permitted. Examples are Open and Full Control.

Each catalog object has an access control list that defines which accounts have which permissions to access the object. The access control list is stored in the object's corresponding attribute (.atr) file. An access control list has the general form that is shown in Table 13–1.

| Account          | Permission   |
|------------------|--------------|
| ApplicationRole1 | Open         |
| ApplicationRole4 | Full Control |
| ApplicationRole3 | Open         |
| User 4           | Open         |
| User 9           | Full Control |
| User 11          | Full Control |

Table 13–1 Access Control List for a Catalog Object

### **Permission Definitions**

To control access to objects (such as a folder in the catalog or a section in a dashboard), you assign permissions to application roles, Catalog groups, and users. The permissions that you can assign vary depending on the type of object with which you are working.

The permissions that are available from the "Permission dialog" are usually parent permissions, meaning that each parent permission contains several child permissions (for example, if the Open permission is applied to a folder, the users of that folder can read, traverse, and run Oracle BI Publisher reports located in that folder). Applying parent permissions, rather than building custom permissions for ever object, is an easy way to consistently assign and maintain permissions. The available parent permissions differ based on the object type with which you are working: folders, Oracle BI Publisher objects, or business intelligence objects. Oracle BI Publisher objects include

reports, data models, sub templates, and style templates. Business intelligence objects include analyses, dashboards, KPIs, scorecards, filters, and prompts.

If in the "Permission dialog" you select the Custom permission, then the "Custom Permissions dialog" is displayed where you can select the permissions that you want to apply to the object. For example, if you are working with a folder object, then you can select the traverse, read, and delete permissions.

Table 13–2 includes the name of each permissions and its definition. For more information about the parent permissions that you can assign to an object and what the parent permission includes based on the type of object with which you are working, see "Permissions Available by Object Type".

Table 13–2 Permission Descriptions

| Permission                | Description  |
|---------------------------|--|
| Read                      | Use this option to give authority to access, but not modify, the object.   |
| Write                     | Use this option to give authority to edit the object.  |
| Delete                    | Use this option to give authority to delete the object.  |
| Traverse                  | Use this option to give authority to access objects in folders within the selected folder when the user does not have permission to the selected folder. For example, if you grant users <b>Traverse Folder</b> permission to the /Shared Folders/Test folder, they cannot access objects in the/Shared Folders/Test folder but can access objects stored in lower-level folders, such as the /Shared Folders/Test/Guest folder. |
| Run Publisher Report      | Use this option to give authority to read, traverse the folder that contains the object, and regenerate the report so that it includes the most recent data.   |
| Schedule Publisher Report | Use this option to give authority to read, traverse the folder that contains the object, and schedule the report.  |
| View Publisher Report     | Use this option to give authority to read, traverse the folder that contains the object, and view, but not regenerate, the report.   |
| Execute                   | Use this option to give authority to run an object, such as an action, agent, or a briefing book.  |
| Change Permissions        | Use this option to give authority to change the object's permissions.  |
| Set Ownership             | Use this option to give authority to reassign ownership of the object.   |
| Full Control              | Use this option to give authority to perform all tasks (modify and delete, for example) on the object.   |
| No Access                 | Use this option to deny access to the object. Explicitly denying access takes precedence over any other permission.  |
| Modify                    | Use this option to give authority to read, write, and delete the object.   |
| Open                      | Use this option to give authority to access, but not modify, the object. If you are working with an Oracle BI Publisher object, this option allows you to traverse the folder that contains the object.  |

Table 13–2 (Cont.) Permission Descriptions

| Permission | Description   |
|------------|---|
| Custom     | Use this option to display the "Custom Permissions dialog", where you grant read, write, execute, and delete permissions.   |
| Granted    | Use this option to give authority to access a section in a dashboard. This permission can be set in the dashboard, only. This permission overrides any catalog permissions set on the section's objects that would prevent the corresponding roles, Catalog groups, and users from accessing them (for example, No Access). For more information, see "Changing the Properties of a Dashboard and its Pages". |
| Denied     | Use this option to deny access to a section in a dashboard. This permission can be set in the dashboard, only. This permission overrides any catalog permissions set on the section's objects that would allow the corresponding roles, Catalog groups, and users to access them (for example, View). For more information, see "Changing the Properties of a Dashboard and its Pages".                       |

# **Permissions Available by Object Type**

The permissions that are available from the "Permission dialog" are usually parent permissions, meaning that each parent permission contains several child permissions. Ffor example, if the Open permission is applied to a folder, then the users of that folder can read, traverse, and run the BI Publisher reports that are located in that folder. The available parent permissions differ based on the object with which you are working.

Table 13–3 includes a listing of the parent permissions and the corresponding child permissions by object type. For a description of each permission, see "Permission Definitions".

Table 13–3 Permissions by Object Type

| Parent Permission                       | Folders   | Oracle BI Publisher<br>Objects          | Objects                  |
|---|---|---|--------------------------|
| Full Control                            | Includes all permissions  | Includes all permissions                | Includes all permissions |
| Modify                                  | Read, write, and delete   | Read, write, and delete                 | Read, write, and delete  |
| Open                                    | Read, traverse, run BI<br>Publisher report  | Run Oracle BI Publisher report          | Read                     |
| Schedule Oracle BI Publisher<br>Reports | Schedule BI Publisher<br>reports that are<br>contained in the folder,<br>read, and traverse | Schedule Oracle BI<br>Publisher reports | Not available            |
| View Oracle BI Publisher Output         | View BI Publisher<br>reports that are<br>contained in the folder,<br>read, and traverse     | View Oracle BI<br>Publisher reports     | Not available            |
| Traverse                                | Traverse folder   | Not available                           | Not available            |
| No Access                               | Object is not accessible  | Object not accessible                   | Object not accessible    |

# **Recommendations for Setting Permissions**

Follow these recommendations when setting permissions:

Use care when assigning permissions to ensure that you do not lock the object by preventing you, an administrator, or any other user from modifying the object.

Assign permissions through application roles, even if you want to assign permissions for a single user. A less recommended alternative to using application roles is to use Catalog groups, also known as Presentation Services groups. Application roles are central to Oracle BI EE while Catalog groups are specific to Oracle BI Presentation Services and are included in this release for backward compatibility.

For information on application roles, see Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition.

For information on Catalog groups, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For application roles (Catalog groups or users, if necessary) that are going to be modifying the dashboards and dashboard content accessible to the role, set the permissions for the role to Full Control. While allowing change and delete control, Full Control also allows the specified role to set permissions and to delete the object, folder, or dashboard.

If you plan to have numerous or varying users that create and modify dashboard content for a given group, then create a separate, corresponding "builder" role that has all the back-end permissions of the primary role, but with a different name. For example, you can create a Sales role and a SalesBuilder role. By giving the SalesBuilder role appropriate permissions to the Oracle BI Presentation Catalog, you can control and change who can make changes to dashboards and content. Assuming session variable security is in place, you can make a user a dashboard builder or content creator by changing the user's role from "Sales" to "SalesBuilder" in the database table that holds security information.

- For each Subject Area, ensure that the BIConsumer and Authenticated User roles have No Access permission to the Subject Area folder.
- For roles that should be able to save analyses for public use against a given Subject Area, grant them Full Control to the Subject Area folder and everything it contains, and likewise for the Common folder.
- To ensure that only members of the designated roles have access to Oracle BI Presentation Catalog folders, folder content, and dashboards, do not set explicit permissions for the AuthenticatedUser role.

**Tip:** To provide a place for all users within an application role to share analyses with each other, create a folder under the Subject Area folder called, for example, Share or Publish, and give the entire role Change/Delete permission to just that folder.

# **Assigning Permissions**

Permissions determine who can access folders, Oracle BI Publisher objects, or other catalog objects. The permissions that you can assign vary depending on the type of object with which you are working. To change permissions, you must have been granted the Change Permission privilege.

**Note:** To access an object in the catalog, users must have appropriate ACL (Access Control List) entries for that object. All objects in the catalog except for alerts use ACL entries. See Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition for information on ACL entries.

Use the following procedure to assign permissions to an object. For more information about permissions, see "Permission Definitions", "Permissions Available by Object Type", and "Recommendations for Setting Permissions".

## To assign permissions to an object:

- In the global header, click **Catalog**. The "Catalog page" is displayed.
- Search for the object to which you want to assign permissions. For more information about searching, see "Searching with the Basic Search".
- Go to the "Catalog area" and locate an object or folder.
- **4.** Select **More** and then **Permissions**, or go to the "Tasks pane" and click **Permissions**. The "Permission dialog" is displayed.
- 5. Click the Add users/roles button to access the "Add Application Roles, Catalog Groups, and Users dialog" to add any required accounts.
- **6.** In the "Permissions dialog," click the **Permissions** list to select permissions. Most of the items that are displayed in the list are parent permissions and contain several child permissions. To build a specific list of permissions, click Custom. The "Custom Permissions dialog" is displayed.
- 7. Click OK.

# Assigning Ownership of Objects

Use the following procedure to assign ownership of an object.

## To assign ownership of an object:

- 1. In the global header, click **Catalog**. The "Catalog page" is displayed.
- 2. Search for the object to which you want to assign ownership. For more information about searching, see "Searching with the Basic Search".
- **3.** Go to the "Catalog area" and locate an object or folder.
- Select **More** and then **Permissions**, or go to the "Tasks pane" and click **Permissions**. The "Permission dialog" is displayed.
- In the Permissions table, go to the **Owner** column and click to specify the owner.
- Click **OK**.

# What is Archiving?

Archiving enables you to bundle the entire catalog, specific folders, or multi-component objects (for example, scorecards) as a .catalog file and upload the catalog file to unarchive the data to another location in the catalog. This process enables you to transfer specific data across environments. For example, you can use this feature to transfer data from a development environment to a production environment.

If you have the necessary privileges, then you can use the Oracle BI EE Catalog Manager to archive and unarchive catalog objects and perform other Catalog maintenance tasks. For more information about Catalog Manager, see "Managing Oracle BI Presentation Catalogs Using Oracle BI Catalog Manager" in *Oracle Fusion* Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

# **Archiving Objects**

Before you can archive, you must have been granted the proper privilege.

#### To create an archive file:

- 1. In the global header, click **Catalog**. The "Catalog page" is displayed.
- Search for the objects that you want to archive. For more information about searching, see "Searching with the Basic Search".
- **3.** Go to the "Folders pane" to select the object.
- Select **More**, then **Archive** below the object. The "Archive dialog" is displayed.
- Specify to maintain or omit the permissions and timestamps for the folder or object.
- **6.** Click **OK**.

### To unarchive an archive file:

- Locate the archive file that you want to upload. The archive file contains the.catalog extension (for example, \_portal.catalog).
- 2. Go to the "Folders pane" and select the location where you want to upload the archive file.
- **3.** Go to the Tasks pane and click **Unarchive**. The "Unarchive dialog" is displayed.
- Enter the name of the archive file or browse for the archive file. Select the archive
- 5. Click OK.

# **Logical SQL Reference**

The Oracle BI Server accepts SQL SELECT statements from client tools. Additionally, the Administration Tool enables you to define logical columns with complex expressions. This appendix explains the syntax and semantics for the SELECT statement and for the expressions you can use in the Administration Tool to create derived columns.

This reference provides syntax and usage information for the Logical SQL statements understood by the Oracle BI Server. Oracle BI Server Logical SQL includes standard SQL, plus special functions (SQL extensions) like AGO, TODATE, EVALUATE, and others. Logical SQL queries resolve to Presentation layer objects.

The abstraction provided by the Presentation layer and Business Model and Mapping layer enables clients to query data with Logical SQL only, so that the interaction with actual physical sources is handled by the Oracle BI Server. The complexity of the multiple source languages needed to communicate with each data source type is hidden from users and clients.

In Answers, you can view the Logical SQL queries issued by Oracle BI Presentation Services for particular analyses by viewing the SQL Issued section of the Advanced tab of the Analysis editor. If you have the appropriate privileges, then you can also view SQL by displaying the Manage Sessions page in the Administration tab. Click **View Log** from the Manage Sessions page to see further details.

In Answers, there are also several places where you can issue Logical SQL. If you have the appropriate privileges, then you can use the Issue SQL page in the Administration tab to enter any SQL code to send to the Oracle BI Server. If an analysis does not contain hierarchical columns, member selections, or groups, then you can use the Advanced SQL Clauses fields in the Advanced tab of the Analysis editor. You can also enter SQL in the New Filter dialog.

Other clients, like Oracle BI Publisher, Oracle's Hyperion Interactive Reporting, Smart View, the Oracle BI Add-in for Microsoft Office, and Essbase, also provide their own interfaces to view and issue Logical SQL to the Oracle BI Server.

This appendix contains the following topics:

- SQL Syntax and Semantics
- Aggregate and Running Aggregate Functions
- **String Functions**
- **Math Functions**
- Calendar Date/Time Functions
- **Conversion Functions**

- **Database Functions**
- **System Functions**

# **SQL Syntax and Semantics**

This section explains SQL syntax and semantics. The following topics are included:

- Syntax and Usage Notes for the SELECT Statement
- Syntax and Usage Notes for SELECT\_PHYSICAL
- Operators
- **Conditional Expressions**
- **Expressing Literals**
- Variables

## Syntax and Usage Notes for the SELECT Statement

The SELECT statement, or query specification, is the way to query a decision support system through the Oracle BI Server. A SELECT statement returns a table to the client that matches the query. It is a table in the sense that the results are in the form of rows and columns.

The SELECT statement is the basis for querying any structured query language (SQL) database. The Oracle BI Server accepts logical requests to query objects in a repository, and users (or query tools) make those logical requests with ordinary SQL SELECT statements. The server then translates the logical requests into physical queries against one or more data sources, combines the results to match the logical request, and returns the answer to the end user.

The SELECT statement in Logical SQL differs from standard SQL in that tables do not need to be joined. Any join conditions supplied in the query are ignored because the join conditions are predefined in the Oracle BI repository.

This section provides the basic syntax for the SELECT statement, as well as definitions for individual clauses. The syntax descriptions cover only basic syntax and features unique to the Oracle BI Server. For a more comprehensive description of SQL syntax, see a third-party reference book on SQL or a reference manual on SQL from your database vendors. For Oracle Database, see Oracle Database SQL Language Reference.

This section contains the following topics:

- Basic Syntax for the SELECT Statement
- **Usage Notes**
- Subquery Support
- SELECT List Syntax
- FROM Clause Syntax
- WHERE Clause Syntax
- **GROUP BY Clause Syntax**
- ORDER BY Clause Syntax

## **Basic Syntax for the SELECT Statement**

Syntax for the SELECT statement is as follows:

```
SELECT [DISTINCT] select list
FROM from_clause
[WHERE search condition]
[GROUP BY column {, column}
     [HAVING search condition]]
[ORDER BY column {, column}]
```

## Where:

select list is the list of columns specified in the request. See "SELECT List Syntax" for more information.

FROM from clause is the list of tables in the request. Optionally includes certain join information for the request. See "FROM Clause Syntax" for more information.

WHERE search condition specifies any combination of conditions to form a conditional test. A WHERE clause acts as a filter that lets you constrain a request to obtain results that answer a particular question. Together with the columns you select, filters determine what your results will contain. See "WHERE Clause Syntax" for more information.

GROUP BY column {, column} specifies a column (or alias) belonging to a table defined in the data source. See for more information.

HAVING search condition specifies any combination of conditions to form a conditional test. The syntax is identical to that for the WHERE clause.

ORDER BY column {, column} specifies the columns to order the results by. See "ORDER BY Clause Syntax" for more information.

## **Usage Notes**

The Oracle BI Server treats the SELECT statement as a logical request. If aggregated data is requested in the SELECT statement, a GROUP BY clause is automatically assumed by the server. Any join conditions supplied in the query are ignored because the join conditions are all predefined in the Oracle BI repository.

The Oracle BI Server accepts the following SQL syntaxes for comments:

- /\* \*/ C-style comments
- // Double slash for single-line comments
- # Number sign for single-line comments

## **Subquery Support**

The Oracle BI Server supports certain subqueries, as well as UNION, UNION ALL, INTERSECT, and EXCEPT operations in logical requests. This functionality increases the range of business questions that can be answered, eases the formulation of queries, and provides some ability to query across multiple business models.

The Oracle BI Server supports the following subquery predicates in any conditional expression (for example, within WHERE, HAVING, or CASE statements):

```
IN, NOT IN
Any, >=Any, =Any, <Any, <=Any, <>Any
All, >=All, =All, <All, <=All, <>All
EXISTS, NOT EXISTS
```

In Answers, advanced users and developers can use the Advanced SQL Clauses fields in the Advanced tab of the Analysis editor to specify various SQL clauses, such as GROUP BY, HAVING, and DISTINCT, to include in the SQL queries that are sent to the

Oracle BI Server. If an analysis contains hierarchical columns, selections, or groups, then certain Advanced SQL Clauses fields are not available.

## SELECT List Syntax

The select list lists the columns in the request. All columns need to be from a single business model. Table names can be included (as Table.Column), but are optional unless column names are not unique within a business model. If column names contain spaces, enclose column names in double quotes. The DISTINCT keyword does not need to be included, because the Oracle BI Server always does a distinct query. Columns that are being aggregated do not need to include the aggregation function (such as SUM), as aggregation rules are known to the server and aggregation is performed automatically.

## Syntax 5 4 1

```
(column | expr) [[AS] alias]
{, (column | expr) [[AS] alias] }
```

#### Where:

\* Indicates all columns in the resultant table in the FROM clause. column is a column (or alias) belonging to a table defined in the data source.

*expr* is any valid SQL expression.

## FROM Clause Syntax

The Oracle BI Server accepts any valid SQL FROM clause syntax. To simplify FROM clause creation, you can specify the name of a subject area instead of a list of tables. The Oracle BI Server determines the proper tables and the proper join specifications based on the columns the request asks for and the configuration of the Oracle BI repository.

## WHERE Clause Syntax

The Oracle BI Server accepts any valid SQL WHERE clause syntax. There is no need to specify any join conditions in the WHERE clause, because the joins are all configured within the Oracle BI repository. Any join conditions specified in the WHERE clause are ignored.

The Oracle BI Server also supports the following subquery predicates in any conditional expression (WHERE, HAVING or CASE statements):

```
IN, NOT IN
Any, >=Any, =Any, <=Any, <>Any
All, >=All, =All, <All, <=All, <>All
EXISTS, NOT EXISTS
```

### **GROUP BY Clause Syntax**

With auto aggregation on the Oracle BI Server, there is no need to submit a GROUP BY clause. When no GROUP BY clause is specified, the GROUP BY specification defaults to all of the nonaggregation columns in the SELECT list. If you explicitly use aggregation functions in the select list, you can specify a GROUP BY clause with different columns and the Oracle BI Server computes the results based on the level specified in the GROUP BY clause.

For an in-depth explanation and some examples of using the GROUP BY clause in requests against the Oracle BI Server, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.

## ORDER BY Clause Syntax

The Oracle BI Server accepts any valid SQL ORDER BY clause syntax, including referencing columns by their order in the select list (such as ORDER BY 3, 1, 5).

In addition, you can use the following syntax to alter the sort order for nulls in the query:

ORDER BY col1 NULLS LAST, ORDER BY col2 NULLS FIRST

## Syntax and Usage Notes for SELECT\_PHYSICAL

The SELECT PHYSICAL command provides the functionality to directly query objects in the Physical layer of the metadata repository, and to nest such a statement within a query against the Business Model and Mapping layer or the Presentation layer.

Though a SELECT PHYSICAL query bypasses the Presentation layer and the Business Model and Mapping layer, the Oracle BI Server still performs parsing, interpretation, and query generation on a SELECT PHYSICAL query before passing it to the database.

A SELECT PHYSICAL command can contain any element allowed in standard Oracle BI Server SQL with the following constraints:

- The SELECT PHYSICAL command does not explicitly reference structures in the repository Business Model and Mapping layer or the Presentation layer
- The SELECT PHYSICAL command does not require implicit logical transformation
- The SELECT PHYSICAL command cannot contain certain aggregate functions see "Aggregate Functions Not Supported in SELECT\_PHYSICAL Queries" for details

**Note:** SELECT\_PHYSICAL statements are not cached.

You can set up an ODBC connection to the Oracle BI Server to be a dedicated physical connection over which all SELECT queries are treated as SELECT PHYSICAL queries. To do this, select **Route Requests To Physical Layer** in the ODBC data source for the Oracle BI Server. See "Integrating Other Clients with Oracle Business Intelligence" in Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise *Edition* for more information.

SELECT PHYSICAL statements are logged as Physical Request entries.

The topics in this section are the following:

- Syntax for the SELECT\_PHYSICAL Statement
- Aggregate Functions Not Supported in SELECT\_PHYSICAL Queries
- Queries Supported by SELECT\_PHYSICAL
- Using the NATURAL\_JOIN Keyword
- Special Usages of SELECT\_PHYSICAL

## Syntax for the SELECT\_PHYSICAL Statement

Basic syntax for SELECT PHYSICAL queries is equivalent to "Basic Syntax for the SELECT Statement" with the term SELECT PHYSICAL replacing the word SELECT, namely:

```
SELECT_PHYSICAL [DISTINCT] select_list
FROM from clause
[WHERE search condition]
[GROUP BY column {, column}
     [HAVING search_condition]]
[ORDER BY column {, column}]
```

**Notes:** The SELECT PHYSICAL statement is close to the standard ANSI SQL SELECT statement. For example, you cannot omit the GROUP BY clause nor, where relevant, the HAVING clause in a SELECT PHYSICAL aggregate query.

In SELECT PHYSICAL queries, you must fully qualify the table names in the FROM list. Each fully qualified table name must match a table name in the physical layer of the repository.

A fully qualified table name consists of up to four components, database name, catalog name, schema name, and table name. Each component is surrounded by double quotes (") with a period (.) separator between components. For example, "SQL\_ DB"."My\_Catalog"."My\_Schema"."Customers" for a SQL Server table, and "FoodMart"..."Sales" for a cube table.

Refer to the corresponding topics in "Basic Syntax for the SELECT Statement" for more information about the different clauses and sub-clauses of the SELECT PHYSICAL command.

## Aggregate Functions Not Supported in SELECT\_PHYSICAL Queries

The following aggregate functions are not supported in SELECT PHYSICAL queries:

- AGO
- BOTTOMN
- FILTER
- FIRST
- LAST
- RCOUNT
- RMAX
- RMIN
- RSUM
- TODATE
- TOPN

## Queries Supported by SELECT\_PHYSICAL

The Oracle BI Server supports the use of SELECT PHYSICAL for the following types of logical query:

**Standard Non-Aggregate Queries** 

Standard non-aggregate SELECT PHYSICAL commands follow the same rules as standard non-aggregate SELECT commands. They can also include scalar functions, such as String, Math, and Calendar Date/Time functions. For example:

```
SELECT PHYSICAL productid, categoryid
FROM "My_DB". "My_Schema". "products"
WHERE categoryid > 5;
SELECT PHYSICAL LEFT (productname, 10)
FROM "My DB". "My Schema". "products"
WHERE productname is not null;
```

## **Queries with Aggregate Functions**

In general, all aggregate functions supported in SELECT queries are also supported in SELECT PHYSICAL queries. See "Aggregate Functions Not Supported in SELECT\_PHYSICAL Queries" for a list of the exceptions to this rule.

For aggregates supported in SELECT PHYSICAL commands, each aggregate must have an explicitly specified aggregation level, using the GROUP BY clause or the BY clause. For example:

```
SELECT_PHYSICAL employeeid, SUM(quantity by)
FROM "My_DB"."My_Schema"."employees";
SELECT_PHYSICAL employeeid, SUM(quantity)
FROM "My DB". "My Schema". "employees"
GROUP BY employeeid
HAVING SUM(quantity) > 100;
```

## **Subqueries**

The Oracle BI Server supports the following types of query:

- Queries where both the parent query and the subquery use SELECT PHYSICAL
- Parent query uses SELECT and subquery uses SELECT PHYSICAL

Subqueries are supported on both filters and on projections embedded in a Case statement.

#### For example:

```
SELECT PHYSICAL *
FROM "My_DB". "My_Schema". "products"
WHERE supplierid IN
 (SELECT PHYSICAL supplierid
 FROM "My_DB". "My_Schema". "suppliers");
SELECT productid
FROM snowflakesales.product
WHERE categoryid IN
 (SELECT PHYSICAL categoryid
 FROM "My_DB"."My_Schema"."categories");
SELECT CASE WHEN b.categoryid IN
 (SELECT PHYSICAL a.categoryid
 FROM "My DB". "My Schema". "products" a)
 THEN b.categoryid END
FROM categories b;
```

## **Queries with Derived Tables**

Both SELECT and SELECT PHYSICAL queries can have derived tables in their FROM clause. The tables can be derived using either SELECT or SELECT PHYSICAL. For example:

```
SELECT PHYSICAL COUNT (DISTINCT t.rto)
FROM
 (SELECT PHYSICAL employeeid AS id, reportsto AS rto
 FROM "My DB". "My Schema". "employees") t;
SELECT productid, categoryid
 (SELECT PHYSICAL productid, categoryid
 FROM "My DB". "My Schema". "products" a
 LEFT OUTER JOIN "My DB". "My Schema". "categories" b
 ON a.categoryid = b.categoryid);
SELECT y.cid, sum(x.qty)
 (SELECT productid pid, categoryid cid, qtysold qty
 FROM sales.product) x
RIGHT OUTER JOIN
 (SELECT PHYSICAL CASE categoryid WHEN 1 THEN null ELSE categoryid END cid
 FROM "My DB". "My Schema". "categories") y
ON x.cid = y.cid
GROUP BY y.cid;
```

#### **Cross-Database Oueries**

You can use SELECT PHYSICAL to join tables in different databases. For example:

```
SELECT_PHYSICAL a.productid, b.categoryid
FROM "My_DB". "My_Schema". "products" a
FULL OUTER JOIN
"My DB2". "My Schema". "categories" b
ON a.categoryid = b.categoryid
```

## Using the NATURAL JOIN Keyword

SELECT PHYSICAL queries support the NATURAL JOIN syntax, which enables you to use predefined join expressions. For ADF Business Component data sources, the ViewLink in ADF becomes active. The NATURAL JOIN join type, however, is not exposed for use in Logical Table Sources (for example, LEFT OUTER JOIN).

You can only use the NATURAL JOIN keyword in SELECT PHYSICAL queries. The NATURAL JOIN behavior in Oracle Business Intelligence is different from the ANSI NATURAL JOIN. The following examples illustrate how joins are executed with and without the NATURAL JOIN syntax:

```
SELECT PHYSICAL *
FROM A, B;
```

In this example, no join is executed between A and B (even if one is defined in the metadata).

```
SELECT PHYSICAL *
FROM A NATURAL JOIN B;
```

In this example, the physical join between A and B is executed. For ADF Business Component data sources, the join expression defined by the underlying ViewLink is used.

```
SELECT PHYSICAL *
```

```
FROM C, A NATURAL JOIN B;
```

In this example, even if C is joined to A in the metadata, only the A-B join is active. The C-A join is not used.

## Special Usages of SELECT\_PHYSICAL

You can use session variables and the INDEXCOL function in a SELECT PHYSICAL command, as in the following examples:

```
SELECT PHYSICAL VALUEOF (NQ SESSION.REGION)
FROM "My_DB". "My_Schema". "products";
SELECT PHYSICAL INDEXCOL(VALUEOF(NQ_SESSION.INDEXCOLINDEX), productid, categoryid)
FROM "My_DB"."My_Schema"."products";
```

## Operators

There are two types of operators: SQL logical operators, and mathematical operators.

## **SQL Logical Operators**

The following SQL logical operators are used to specify comparisons between expressions.

- **Between:** Used to determine boundaries for a condition. Each boundary is an expression, and the bounds do not include the boundary limits, as in less than and greater than (as opposed to less than or equal to and greater than or equal to). BETWEEN can be preceded with NOT to negate the condition.
- **In:** Specifies a comparison of a column value with a set of values.
- **Is Null:** Specifies a comparison of a column value with the null value.
- **Like:** Specifies a comparison to a literal value. Often used with wildcard characters to indicate any character string match of zero or more characters (%) or a any single character match (\_).

#### Mathematical Operators

Mathematical operators are used to combine expression elements to make certain types of comparisons in an expression.

Table A–1 lists operators and describes their use in an expression.

Table A-1 Operators

| Operator | Description  |
|----------|--|
| +        | Plus sign for addition.  |
| -        | Minus sign for subtraction.                                      |
| *        | Multiply sign for multiplication.                                |
| /        | Divide by sign for division.                                     |
|          | Character string concatenation.                                  |
| (        | Open parenthesis.  |
| )        | Closed parenthesis.  |
| >        | Greater than sign, indicating values higher than the comparison. |
| <        | Less than sign, indicating values lower than the comparison.     |

Table A-1 (Cont.) Operators

| Operator | Description   |
|----------|---|
| =        | Equal sign, indicating the same value.  |
| <=       | Less than or equal to sign, indicating values the same or lower than the comparison.              |
| >=       | Greater than or equal to sign, indicating values the same or higher than the comparison.          |
| <>       | Not equal to, indicating values higher or lower, but different.                                   |
| AND      | AND connective, indicating intersection with one or more conditions to form a compound condition. |
| OR       | OR connective, indicating the union with one or more conditions to form a compound condition.     |
| NOT      | NOT connective, indicating a condition is not met.  |
| ,        | Comma, used to separate elements in a list.   |

## **Conditional Expressions**

Expressions are building blocks for creating conditional expressions that convert a value from one form to another. Expressions include:

- CASE (Switch)
- CASE (If)

## CASE (Switch)

This form of the CASE statement is also referred to as the CASE (Lookup) form. The value of expr1 is examined, then the WHEN expressions. If expr1 matches any WHEN expression, it assigns the value in the corresponding THEN expression.

If none of the WHEN expressions match, it assigns the default value specified in the ELSE expression. If no ELSE expression is specified, the system automatically adds an ELSE NULL.

If expr1 matches an expression in multiple WHEN clauses, only the expression following the first match is assigned.

**Note:** In a CASE statement, AND has precedence over OR.

## **Syntax**

```
CASE expr1
     WHEN expr2 THEN expr3
     {WHEN expr... THEN expr...}
     ELSE expr
END
```

#### Where:

CASE starts the CASE statement. Must be followed by an expression and one or more WHEN and THEN statements, an optional ELSE statement, and the END keyword.

WHEN specifies the condition to be satisfied.

THEN specifies the value to assign if the corresponding WHEN expression is satisfied.

ELSE specifies the value to assign if none of the WHEN conditions are satisfied. If omitted, ELSE NULL is assumed.

END ends the CASE statement.

#### **Example**

```
CASE Score-par
 WHEN -5 THEN 'Birdie on Par 6'
 WHEN -4 THEN 'Must be Tiger'
 WHEN -3 THEN 'Three under par'
 WHEN -2 THEN 'Two under par'
 WHEN -1 THEN 'Birdie'
 WHEN 0 THEN 'Par'
 WHEN 1 THEN 'Bogey'
 WHEN 2 THEN 'Double Bogey'
 ELSE 'Triple Bogey or Worse'
END
```

In this example, the WHEN statements must reflect a strict equality. For example, a WHEN condition of WHEN < 0 THEN 'Under Par' is illegal because comparison operators are not allowed.

## CASE (If)

This form of the CASE statement evaluates each WHEN condition and if satisfied, assigns the value in the corresponding THEN expression.

If none of the WHEN conditions are satisfied, it assigns the default value specified in the ELSE expression. If no ELSE expression is specified, the system automatically adds an ELSE NULL.

**Note:** In a CASE statement, AND has precedence over OR.

## **Syntax**

```
CASE
    WHEN request condition1 THEN expr1
     {WHEN request condition2 THEN expr2}
     {WHEN request_condition... THEN expr...}
    ELSE expr
END
```

#### Where:

CASE starts the CASE statement. Must be followed by one or more WHEN and THEN statements, an optional ELSE statement, and the END keyword.

WHEN specifies the condition to be satisfied.

THEN specifies the value to assign if the corresponding WHEN expression is satisfied.

ELSE specifies the value to assign if none of the WHEN conditions are satisfied. If omitted, ELSE NULL is assumed.

END ends the CASE statement.

## Example

```
CASE
 WHEN score-par < 0 THEN 'Under Par'
```

```
WHEN score-par = 0 THEN 'Par'
 WHEN score-par = 1 THEN 'Bogie'
 WHEN score-par = 2 THEN 'Double Bogey'
 ELSE 'Triple Bogey or Worse'
END
```

Unlike the Switch form of the CASE statement, the WHEN statements in the If form allow comparison operators. For example, a WHEN condition of WHEN < 0 THEN 'Under Par' is legal.

## **Expressing Literals**

A literal is a nonnull value corresponding to a given data type. Literals are typically constant values, or in other words, they are values that are taken as they are. A literal value must comply with the data type that it represents.

SQL provides mechanisms for expressing literals in SQL statements. This following topics describe how to express each type of literal in SQL:

- Character Literals
- **Datetime Literals**
- **Numeric Literals**

## **Character Literals**

A character literal represents a value of CHARACTER or VARCHAR data type. To express a character literal, enclose the character string in single quotes ('). The number of characters enclosed between the single quotes implies the length of the literal.

#### **Examples**

```
'Oracle BI Server'
'abc123'
```

#### **Datetime Literals**

The SQL 92 standard defines three kinds of 'typed' datetime literals, in the following formats:

```
DATE 'yyyy-mm-dd'
TIME 'hh:mm:ss'
TIMESTAMP 'yyyy-mm-dd hh:mm:ss'
```

To express a typed datetime literal, use the keywords DATE, TIME, or TIMESTAMP followed by a datetime string enclosed in single quotation marks, as in the preceding example. Two digits are required for all nonyear components even if the value is a single digit.

### **Examples**

```
DATE '2000-08-15'
TIME '11:55:25'
TIMESTAMP '1999-03-15 11:55:25'
```

## **Numeric Literals**

A numeric literal represents a value of a numeric data type (such as INTEGER, DECIMAL, or FLOAT). To express a numeric literal, type the number as part of a SQL statement.

Do not surround numeric literals with single quotes. Doing so expresses the literal as a character literal.

Numeric literals include:

- **Integer Literals**
- **Decimal Literals**
- Floating Point Literals

**Integer Literals** To express an integer constant as a literal, specify the integer as part of a SQL statement (for example, in the SELECT list). Precede the integer with a plus sign (+) to indicate the integer is positive, or a minus sign (-) to indicate the integer is negative. Unsigned integers are assumed to be positive.

## **Examples**

```
234
+2
567934
```

**Decimal Literals** To express a decimal literal, specify a decimal number. Precede the number with a plus sign (+) to indicate the number is positive, or a minus sign (-) to indicate the number is negative. Unsigned numbers are assumed to be positive.

#### **Examples**

```
1.223
-22,456
+33.456789
```

**Floating Point Literals** To express floating point numbers as literal constants, enter a decimal literal followed by the letter E (either uppercase or lowercase), followed by the plus sign (+) to indicate a positive exponent, or the minus sign (-) to indicate a negative exponent. No spaces are allowed between the integer, the letter E, and the sign of the exponent.

## **Examples**

```
333.456E-
1.23e+
```

## **Variables**

You can include and set variables in SQL statements. To do this, include the variable at the beginning of the SQL statement.

#### **Syntax**

```
SET VARIABLE variable name = variable value; SELECT statement
```

If you are executing a query from the nqcmd utility, use a colon as a delimiter. Otherwise, you can use either a semicolon or a colon.

## **Examples**

```
SET VARIABLE LOGLEVEL = 3; SELECT Products.Brand, Measures.Dollars FROM "Products"
SET VARIABLE DISABLE_CACHE_HIT=1, LOGLEVEL = 3, WEBLANGUAGE='en': SELECT
Products.Brand, Measures.Dollars FROM "Products"
```

# Aggregate and Running Aggregate Functions

This section contains information about aggregate functions, running aggregate functions, and time series functions:

- **Aggregate Functions**
- **Running Aggregate Functions**
- Time Series Functions

## **Aggregate Functions**

Aggregate functions perform operations on multiple values to create summary results.

Aggregate functions include:

- AGGREGATE AT
- **AVG**
- **AVGDISTINCT**
- **BOTTOMN**
- **COUNT**
- COUNTDISTINCT
- COUNT(\*)
- **MAX**
- **MEDIAN**
- **MIN**
- **NTILE**
- **PERCENTILE**
- **RANK**
- **STDDEV**
- STDDEV\_POP
- **SUM**
- **SUMDISTINCT**
- **TOPN**

## **AGGREGATE AT**

This function aggregates columns based on the level or levels you specify. Using AGGREGATE AT guarantees that the aggregate for the measure always occurs at the levels specified after the keyword AT, regardless of the WHERE clause.

## **Syntax**

```
AGGREGATE (expr AT level [, level1, levelN])
```

#### Where:

*expr* is any expression that references at least one measure column

*level* is the level at which you want to aggregate. You can optionally specify multiple levels.

You cannot specify a level from a dimension that contains levels that are being used as the measure level for the measure you specified in the first argument. For example, you cannot write the function as AGGREGATE (yearly sales AT month) because "month" is from the same time dimension that is being used as the measure level for "yearly\_sales."

## **Example**

Result:

The following example shows the AGGREGATE AT function and example results:

```
SELECT month, year, AGGREGATE(sales AT Year)
FROM timeseriestesting
WHERE year = 1994 AND month = 12
```

#### Month Year AGGREGATE AT year 1994 7396 Row count: 1

Because the AGGREGATE AT operator is always executed before the predicates, it always returns the correct total for the time level specified after the keyword AT.

## **AVG**

This function calculates the average (mean) value of an expression in a result set. It must take a numeric expression as its argument.

Note that the denominator of AVG is the number of rows aggregated. For this reason, it is usually a mistake to use AVG(x) in a calculation in Oracle Business Intelligence. Instead, write the expression manually so that you can control both the numerator and denominator (x/y).

## **Syntax**

AVG (numExpr)

#### Where:

numExpr is any expression that evaluates to a numeric value.

## **AVGDISTINCT**

This function calculates the average (mean) of all distinct values of an expression. It must take a numeric expression as its argument.

## **Syntax**

AVG (DISTINCT numExpr)

#### Where:

numExpr is any expression that evaluates to a numeric value.

## BOTTOMN

This function ranks the lowest *n* values of the expression argument from 1 to *n*, 1 corresponding to the lowest numeric value. The BOTTOMN function operates on the values returned in the result set. A request can contain only one BOTTOMN expression.

## **Syntax**

```
BOTTOMN (numExpr, integer)
```

#### Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the bottom number of rankings displayed in the result set, 1 being the lowest rank.

## COUNT

This function calculates the number of rows having a nonnull value for the expression. The expression is typically a column name, in which case the number of rows with nonnull values for that column is returned.

## Syntax:

COUNT (expr)

#### Where:

expr is any expression.

## COUNTDISTINCT

This function adds distinct processing to the COUNT function.

## **Syntax**

```
COUNT (DISTINCT expr)
```

## Where:

expr is any expression.

## COUNT(\*)

This function counts the number of rows.

#### **Syntax**

COUNT(\*)

## **Example**

For example, if a table named Facts contained 200,000,000 rows, the sample request would return the results shown:

```
SELECT COUNT(*) FROM Facts
```

## Result:

200000000

#### MAX

This function calculates the maximum value (highest numeric value) of the rows satisfying the numeric expression argument.

#### Syntax 1 4 1

MAX (numExpr)

Where:

numExpr is any expression that evaluates to a numeric value.

#### MEDIAN

This function calculates the median (middle) value of the rows satisfying the numeric expression argument. When there are an even number of rows, the median is the mean of the two middle rows. This function always returns a double.

## **Syntax**

MEDIAN (numExpr)

Where:

numExpr is any expression that evaluates to a numeric value.

#### MIN

This function calculates the minimum value (lowest numeric value) of the rows satisfying the numeric expression argument.

#### Syntax 1 4 1

MIN (numExpr)

Where:

numExpr is any expression that evaluates to a numeric value.

## NTILE

This function determines the rank of a value in terms of a user-specified range. It returns integers to represent any range of ranks. In other words, the resulting sorted data set is broken into several tiles where there are roughly an equal number of values in each tile.

NTile with numTiles = 100 returns what is commonly called the "percentile" (with numbers ranging from 1 to 100, with 100 representing the high end of the sort). This value is different from the results of the Oracle BI PERCENTILE function, which conforms to what is called "percent rank" in SQL 92 and returns values from 0 to 1.

#### Syntax 5 4 1

NTILE (numExpr, numTiles)

## Where:

numExpr is any expression that evaluates to a numeric value.

numTiles is a positive, nonnull integer that represents the number of tiles.

If the numExpr argument is not null, the function returns an integer that represents a rank within the requested range.

## PERCENTILE

This function calculates a percent rank for each value satisfying the numeric expression argument. The percentile rank ranges are from 0 (1st percentile) to 1 (100th percentile), inclusive.

The percentile is calculated based on the values in the result set.

#### Syntax 5 4 1

```
PERCENTILE (numExpr)
```

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

## **RANK**

This function calculates the rank for each value satisfying the numeric expression argument. The highest number is assigned a rank of 1, and each successive rank is assigned the next consecutive integer (2, 3, 4,...). If certain values are equal, they are assigned the same rank (for example, 1, 1, 1, 4, 5, 5, 7...).

The rank is calculated based on the values in the result set.

## **Syntax**

RANK (numExpr)

### Where:

*numExpr* is any expression that evaluates to a numeric value.

## STDDEV

This function returns the standard deviation for a set of values. The return type is always a double. STDEV SAMP is a synonym for STDDEV.

#### **Syntax**

```
STDDEV([ALL | DISTINCT] numExpr)
```

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

If ALL is specified, the standard deviation is calculated for all data in the set.

If DISTINCT is specified, all duplicates are ignored in the calculation.

If nothing is specified (the default), all data is considered.

## STDDEV POP

This function returns the standard deviation for a set of values using the computational formula for population variance and standard deviation.

#### Syntax 1 4 1

```
STDDEV POP([ALL | DISTINCT] numExpr)
```

### Where:

*numExpr* is any expression that evaluates to a numeric value.

If ALL is specified, the standard deviation is calculated for all data in the set.

If DISTINCT is specified, all duplicates are ignored in the calculation.

If nothing is specified (the default), all data is considered.

## SUM

This function calculates the sum obtained by adding up all values satisfying the numeric expression argument.

### **Syntax**

SUM (numExpr)

#### Where:

numExpr is any expression that evaluates to a numeric value.

### SUMDISTINCT

This function calculates the sum obtained by adding all of the distinct values satisfying the numeric expression argument.

## **Syntax**

SUM (DISTINCT numExpr)

#### Where:

numExpr is any expression that evaluates to a numeric value.

## **TOPN**

This function ranks the highest n values of the expression argument from 1 to n, 1 corresponding to the highest numeric value. The TOPN function operates on the values returned in the result set. A request can contain only one TOPN expression.

## **Syntax**

TOPN (numExpr, integer)

#### Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the top number of rankings displayed in the result set, 1 being the highest rank.

# **Running Aggregate Functions**

Running aggregate functions are similar to functional aggregates in that they take a set of records as input, but instead of outputting the single aggregate for the entire set of records, they output the aggregate based on records encountered so far.

This section describes the running aggregate functions supported by the Oracle BI Server. Functions include:

- **MAVG**
- **MSUM**
- **RSUM**

- **RCOUNT**
- **RMAX**
- **RMIN**

## MAVG

This function calculates a moving average (mean) for the last *n* rows of data in the result set, inclusive of the current row.

The average for the first row is equal to the numeric expression for the first row. The average for the second row is calculated by taking the average of the first two rows of data. The average for the third row is calculated by taking the average of the first three rows of data, and so on until you reach the *n*th row, where the average is calculated based on the last *n* rows of data.

## **Syntax**

MAVG(numExpr, integer)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

integer is any positive integer. Represents the average of the last n rows of data.

## MSUM

This function calculates a moving sum for the last *n* rows of data, inclusive of the current row.

The sum for the first row is equal to the numeric expression for the first row. The sum for the second row is calculated by taking the sum of the first two rows of data. The sum for the third row is calculated by taking the sum of the first three rows of data, and so on. When the nth row is reached, the sum is calculated based on the last n rows of data.

### **Syntax**

MSUM (numExpr, integer)

## Where:

*numExpr* is any expression that evaluates to a numeric value.

*integer* is any positive integer. Represents the average of the last *n* rows of data.

#### Example

This example shows a query that uses the MSUM function, along with example query results.

select month, revenue, MSUM(revenue, 3) as 3 MO SUM from sales subject area

## Result:

| MONTH | REVENUE | 3_MO_SUM |
|-------|---------|----------|
| JAN   | 100.00  | 100.00   |
| FEB   | 200.00  | 300.00   |
| MAR   | 100.00  | 400.00   |
| APRIL | 100.00  | 400.00   |
| MAY   | 300.00  | 500.00   |
| JUNE  | 400.00  | 800.00   |

| JULY | 500.00 | 1200.00 |
|------|--------|---------|
| AUG  | 500.00 | 1400.00 |
| SEPT | 500.00 | 1500.00 |
| OCT  | 300.00 | 1300.00 |
| NOV  | 200.00 | 1000.00 |
| DEC  | 100.00 | 600.00  |

#### **RSUM**

This function calculates a running sum based on records encountered so far. The sum for the first row is equal to the numeric expression for the first row. The sum for the second row is calculated by taking the sum of the first two rows of data. The sum for the third row is calculated by taking the sum of the first three rows of data, and so on.

## **Syntax**

RSUM (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

In Answers, you can also use the following alternate syntax:

```
RSUM(expression1 [BY expression2[, expression3[, ...]]])
```

#### Where:

expression1, expression2, expression3 ... can be any column reference, or an arithmetic expression on column references.

The BY clause causes the RSUM computation to restart at the row where the value of any of the BY columns differs from the previous row.

## Example

This example shows a query that uses the RSUM function, along with example query results.

SELECT month, revenue, RSUM(revenue) as RUNNING\_SUM from sales\_subject\_area

## Result:

| MONTH | REVENUE | RUNNING_SUM |
|-------|---------|-------------|
| JAN   | 100.00  | 100.00      |
| FEB   | 200.00  | 300.00      |
| MAR   | 100.00  | 400.00      |
| APRIL | 100.00  | 500.00      |
| MAY   | 300.00  | 800.00      |
| JUNE  | 400.00  | 1200.00     |
| JULY  | 500.00  | 1700.00     |
| AUG   | 500.00  | 2200.00     |
| SEPT  | 500.00  | 2700.00     |
| OCT   | 300.00  | 3000.00     |
| NOV   | 200.00  | 3200.00     |
| DEC   | 100.00  | 3300.00     |

## **RCOUNT**

This function takes a set of records as input and counts the number of records encountered so far.

## **Syntax**

```
RCOUNT (expr)
```

#### Where.

*expr* is an expression of any data type.

In Answers, you can also use the following alternate syntax:

```
RCOUNT(expression1 [BY expression2[, expression3[, ...]]])
```

#### Where:

expression1, expression2, expression3 ... can be any column reference, or an arithmetic expression on column references.

The BY clause causes the RCOUNT computation to restart at the row where the value of any of the BY columns differs from the previous row.

#### **Example**

This example shows a query that uses the RCOUNT function, along with example query results.

```
select month, profit, RCOUNT(profit) from sales subject area where profit > 200
```

#### Result:

| MONTH | PROFIT | RCOUNT(profit) |
|-------|--------|----------------|
| MAY   | 300.00 | 2              |
| JUNE  | 400.00 | 3              |
| JULY  | 500.00 | 4              |
| AUG   | 500.00 | 5              |
| SEPT  | 500.00 | 6              |
| OCT   | 300.00 | 7              |

## **RMAX**

This function takes a set of records as input and shows the maximum value based on records encountered so far. The specified data type must be one that can be ordered.

#### **Syntax**

```
RMAX(expr)
```

## Where:

expr is an expression of any data type. The data type must be one that has an associated sort order.

In Answers, you can also use the following alternate syntax:

```
RMAX(expression1 [BY expression2[, expression3[, ...]]])
```

#### Where:

expression1, expression2, expression3 ... can be any column reference, or an arithmetic expression on column references.

The BY clause causes the RMAX computation to restart at the row where the value of any of the BY columns differs from the previous row.

### **Example**

This example shows a query that uses the RMAX function, along with example query results.

SELECT month, profit, RMAX(profit) from sales subject area

#### Result:

| MONTH | PROFIT | RMAX(profit) |
|-------|--------|--------------|
| JAN   | 100.00 | 100.00       |
| FEB   | 200.00 | 200.00       |
| MAR   | 100.00 | 200.00       |
| APRIL | 100.00 | 200.00       |
| MAY   | 300.00 | 300.00       |
| JUNE  | 400.00 | 400.00       |
| JULY  | 500.00 | 500.00       |
| AUG   | 500.00 | 500.00       |
| SEPT  | 500.00 | 500.00       |
| OCT   | 300.00 | 500.00       |
| NOV   | 200.00 | 500.00       |
| DEC   | 100.00 | 500.00       |
|       |        |              |

## RMIN

This function takes a set of records as input and shows the minimum value based on records encountered so far. The specified data type must be one that can be ordered.

#### Syntax 1 4 1

RMIN(expr)

#### Where:

*expr* is an expression of any data type. The data type must be one that has an associated sort order.

In Answers, you can also use the following alternate syntax:

```
RMIN(expression1 [BY expression2[, expression3[, ...]]])
```

#### Where:

expression1, expression2, expression3 ... can be any column reference, or an arithmetic expression on column references.

The BY clause causes the RMIN computation to restart at the row where the value of any of the BY columns differs from the previous row.

## Example

This example shows a query that uses the RMIN function, along with example query results.

```
select month, profit, RMIN(profit) from sales_subject_area
```

## Result:

| MONTH | PROFIT | RMIN(profit) |
|-------|--------|--------------|
| JAN   | 400.00 | 400.00       |
| FEB   | 200.00 | 200.00       |
| MAR   | 100.00 | 100.00       |
| APRIL | 100.00 | 100.00       |
| MAY   | 300.00 | 100.00       |
| JUNE  | 400.00 | 100.00       |
| JULY  | 500.00 | 100.00       |
| AUG   | 500.00 | 100.00       |
| SEPT  | 500.00 | 100.00       |

| OCT | 300.00 | 100.00 |
|-----|--------|--------|
| NOV | 200.00 | 100.00 |
| DEC | 100.00 | 100.00 |

## **Time Series Functions**

Time series functions operate on time-oriented dimensions. The time series functions calculate AGO, TODATE, and PERIODROLLING functions based on user supplied calendar tables, not on standard SQL date manipulation functions.

Time series functions operate on time-oriented dimensions. To use time series functions on a particular dimension, you have to designate the dimension as a Time dimension and set one or more keys at one or more levels as chronological keys. See Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business *Intelligence Enterprise Edition* for more information.

#### Functions include:

- **AGO**
- PERIODROLLING
- **TODATE**

### **AGO**

This function is a time series aggregation function that calculates the aggregated value from the current time back to a specified time period. For example, AGO can produce sales for every month of the current quarter and the corresponding quarter-ago sales.

Multiple AGO functions can be nested if all the AGO functions have the same level argument. You can nest exactly one TODATE and multiple AGO functions if they each have the same level argument.

## **Syntax**

```
AGO(expr, [time level], offset)
```

#### Where:

*expr* is an expression that references at least one measure column.

time level is an optional argument that specifies the type of time period, such as quarter, month, or year.

offset is an integer literal that represents the time shift amount.

## **Example**

The following example returns last year's sales:

```
AGO(sales, year, 1)
```

Determining the Level Used by the AGO Function The unit of time (offset) used in the AGO function is called the *level* of the function. This value is determined by the measure level of the measures in its first argument, the AGO level (optionally specified within the function), and the query level of the query to which the function belongs.

The measure level for the measure can be set in the Administration Tool. If a measure level has been set for the measure used in the function, the measure level is used as the level of the function. The measure level is also called the storage grain of the function.

- The AGO level can be optionally specified as the second argument of the function. If a measure level has not been set in the Administration Tool, but an AGO level has been specified, the AGO level is used as the level of the function. The AGO level is also called the *time series grain* of the function.
- If a measure level has not been set in the Administration Tool, and if no AGO level has been set explicitly in the function, the query level is used as the level of the function. The query level is also called the *query grain* of the function.

### PERIODROLLING

This function computes the aggregate of a measure over the period starting x units of time and ending y units of time from the current time. For example, you can use PERIODROLLING to compute sales for a period that starts at a certain quarter before and ends at a certain quarter after the current quarter.

You cannot nest AGO and TODATE functions within a PERIODROLLING function. Also, you cannot nest PERIODROLLING, FIRST, and LAST functions.

If you embed other aggregate functions (like RANK, TOPN, PERCENTILE, FILTER, or RSUM) inside PERIODROLLING, the PERIODROLLING function is pushed inward. For example, PERIODROLLING (TOPN (measure)) is executed as TOPN (PERIODROLLING (measure)).

## **Syntax**

```
PERIODROLLING(measure, x ,y [,hierarchy])
```

#### Where:

measure is the name of a measure column.

x is an integer that specifies the offset from the current time. Precede the integer with a minus sign (-) to indicate an offset into the past.

y specifies the number of time units over which the function will compute. To specify the current time, enter 0.

hierarchy is an optional argument that specifies the name of a hierarchy in a time dimension, such as yr, mon, day, that you want to use to compute the time window. This option is useful when there are multiple hierarchies in a time dimension, or when you want to distinguish between multiple time dimensions.

If you want to roll back or forward the maximum possible amount, use the keyword UNBOUND. For example, the function PERIODROLLING (measure, -UNBOUND, 0) sums over the period starting from the beginning of time until now.

You can combine PERIODROLLING and AGGREGATE AT functions to specify the level of the PERIODROLLING function explicitly. For example, if the query level is day but you want to find the sum of the previous and current months, use the following:

```
SELECT year, month, day, PERIODROLLING (AGGREGATE (sales AT month), -1)
```

#### **Examples**

```
PERIODROLLING (monthly_sales, -1, 1)
PERIODROLLING (monthly sales, -UNBOUND, 2)
PERIODROLLING (monthly sales, -UNBOUND, UNBOUND)
```

Determining the Level Used by the PERIODROLLING Function The unit of time (offset) used in the PERIODROLLING function is called the *level* of the function. This value is determined by the measure level of the measures in its first argument and the query level of the query to which the function belongs. The measure level for the measure can be set in the Administration Tool. If a measure level has been set for the measure used in the function, the measure level is used as the level of the function. The measure level is also called the *storage grain* of the function.

If a measure level has not been set in the Administration Tool, then the query level is used. The query level is also called the *query grain* of the function. In the following example, the query level is month, and the PERIODROLLING function computes the sum of the last, current, and next month for each city for the months of March and April:

```
SELECT year, month, country, city, PERIODROLLING(sales, -1, 1)
WHERE month in ('Mar', 'Apr') AND city = 'New York'
```

When there are multiple hierarchies in the time dimension, you must specify the *hierarchy* argument in the PERIODROLLING function. For example:

```
SELECT year, fiscal year, month, PERIODROLLING(sales, -1, 1, "fiscal time
hierarchy")
```

In this example, the level of the PERIODROLLING function is fiscal year.

#### TODATE

This function is a time series aggregation function that aggregates a measure from the beginning of a specified time period to the currently displayed time. For example, this function can calculate Year to Date sales.

A TODATE function may not be nested within another TODATE function. You can nest exactly one TODATE and multiple AGO functions if they each have the same level argument.

TODATE is different from the TO DATE SQL function supported by some databases. Do not use TO DATE to change to a DATE data type. Instead, use the CAST function. See "CAST" for more information.

### Syntax 1 4 1

```
TODATE(expr, time level)
```

#### Where:

*expr* is an expression that references at least one measure column.

time level is the type of time period, such as quarter, month, or year.

## **Example**

The following example returns the year-to-date sales:

```
TODATE(sales, year)
```

# String Functions

String functions perform various character manipulations, and they operate on character strings. Functions include:

ASCII

- **BIT\_LENGTH**
- **CHAR**
- CHAR\_LENGTH
- **CONCAT**
- **INSERT**
- **LEFT**
- **LENGTH**
- **LOCATE**
- **LOCATEN**
- **LOWER**
- OCTET\_LENGTH
- **POSITION**
- **REPEAT**
- **REPLACE**
- **RIGHT**
- **SPACE**
- **SUBSTRING**
- **TRIMBOTH**
- **TRIMLEADING**
- **TRIMTRAILING**
- **UPPER**

## **ASCII**

This function converts a single character string to its corresponding ASCII code, between 0 and 255. If the character expression evaluates to multiple characters, the ASCII code corresponding to the first character in the expression is returned.

## Syntax

ASCII(strExpr)

## Where:

strExpr is any expression that evaluates to a character string.

## BIT\_LENGTH

This function returns the length, in bits, of a specified string. Each Unicode character is 2 bytes in length (equal to 16 bits).

## **Syntax**

BIT LENGTH(strExpr)

## Where:

strExpr is any expression that evaluates to character string.

## CHAR

This function converts a numeric value between 0 and 255 to the character value corresponding to the ASCII code.

#### Syntax

CHAR (numExpr)

Where:

numExpr is any expression that evaluates to a numeric value between 0 and 255.

## CHAR\_LENGTH

This function returns the length, in number of characters, of a specified string. Leading and trailing blanks are not counted in the length of the string.

## **Syntax**

```
CHAR LENGTH (strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

## CONCAT

There are two forms of this function. The first form concatenates two character strings. The second form uses the character string concatenation character to concatenate more than two character strings.

## Syntax for Form 1 (To Concatenate Two Strings)

```
CONCAT(strExpr1, strExpr2)
```

Where:

strExprs are expressions that evaluate to character strings, separated by commas.

#### Example

This example request returns the results shown.

```
SELECT DISTINCT CONCAT('abc', 'def') FROM employee
CONCAT('abc', 'def')
```

#### Result:

abcdef

## Syntax for Form 2 (To Concatenate More Than Two Strings)

```
CONCAT(strExpr1, strExpr2 | strExpr3)
```

#### Where:

strExprs are expressions that evaluate to character strings, separated by commas and the character string concatenation operator | | (double vertical bars). First, strExpr2 is concatenated with strExpr3 to produce an intermediate string, then both strExpr1 and the intermediate string are concatenated by the CONCAT function to produce the final string.

## Example

This example request returns the results shown.

```
SELECT DISTINCT CONCAT('abc','def' |  'ghi') FROM employee
```

#### Result:

abcdefqhi

## **INSERT**

This function inserts a specified character string into a specified location in another character string.

## **Syntax**

```
INSERT(strExpr1, integer1, integer2, strExpr2)
```

#### Where:

strExpr1 is any expression that evaluates to a character string. Identifies the target character string.

integer1 is any positive integer that represents the number of characters from the beginning of the target string where the second string is to be inserted.

integer2 is any positive integer that represents the number of characters in the target string to be replaced by the second string.

strExpr2 is any expression that evaluates to a character string. Identifies the character string to be inserted into the target string.

## **Example**

In the first string, starting at the second position (occupied by the number 2), three characters (the numbers 2, 3, and 4) are replaced by the string abcd.

```
SELECT INSERT('123456', 2, 3, 'abcd') FROM table
```

#### Result:

1abcd56 1abcd56

## LEFT

Returns a specified number of characters from the left of a string.

### **Syntax**

```
LEFT(strExpr, integer)
```

#### Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of characters from the left of the string to return.

#### Example

This example returns the three leftmost characters from the character string 123456:

```
SELECT LEFT('123456', 3) FROM table
Result:
123
123
```

## LENGTH

This function returns the length, in number of characters, of a specified string. The length is returned excluding any trailing blank characters.

## **Syntax**

```
\verb|LENGTH|(strExpr)|
```

#### Where:

strExpr is any expression that evaluates to a character string.

## LOCATE

This function returns the numeric position of a character string in another character string. If the character string is not found in the string being searched, the function returns a value of 0.

If you want to specify a starting position to begin the search, use the LOCATEN function instead. See "LOCATEN" for details.

## **Syntax**

```
LOCATE(strExpr1, strExpr2)
```

#### Where:

strExpr1 is any expression that evaluates to a character string. Identifies the string for which to search.

strExpr2 is any expression that evaluates to a character string. Identifies the string to be searched.

#### **Examples**

This example returns 4 as the numeric position of the letter d in the character string abcdef:

```
Locate('d', 'abcdef')
```

This example returns 0, because the letter g is not found within the string being searched.

```
Locate('g', 'abcdef')
```

## LOCATEN

This function returns the numeric position of a character string in another character string. LOCATEN is identical to the LOCATE function, except that the search begins at the position specified by an integer argument. If the character string is not found in the string being searched, the function returns a value of 0. The numeric position to return is determined by counting the first character in the string as occupying position 1, regardless of the value of the integer argument.

#### **Syntax**

```
LOCATEN(strExpr1, strExpr2, integer)
```

#### Where:

strExpr1 is any expression that evaluates to a character string. Identifies the string for which to search.

strExpr2 is any expression that evaluates to a character string. Identifies the string to be searched.

integer is any positive (nonzero) integer that represents the starting position to begin to look for the character string.

#### **Examples**

This example returns 4 as the numeric position of the letter d in the character string abcdef. The search begins with the letter c, the third character in the string. The numeric position to return is determined by counting the letter 'a' as occupying position 1.

```
LOCATEN('d' 'abcdef', 3)
```

This example returns 0, because the letter b occurs in the string before the starting position to begin the search.

```
LOCATEN('b' 'abcdef', 3)
```

# LOWER

This function converts a character string to lowercase.

# **Syntax**

LOWER (strExpr)

Where:

strExpr is any expression that evaluates to a character string.

# OCTET\_LENGTH

This function returns the number of bits, in base 8 units (number of bytes), of a specified string.

#### **Syntax**

```
OCTET LENGTH (strExpr)
```

Where:

strExpr is any expression that evaluates to a character string.

#### **POSITION**

This function returns the numeric position of *strExpr1* in a character expression. If strExpr1 is not found, the function returns 0. See also "LOCATE" and "LOCATEN" for related information.

#### **Syntax**

```
POSITION(strExpr1 IN strExpr2)
```

#### Where.

strExpr1 is any expression that evaluates to a character string. Identifies the string to search for in the target string.

strExpr2 is any expression that evaluates to a character string. Identifies the target string to be searched.

### **Examples**

This example returns 4 as the position of the letter d in the character string abcdef:

```
POSITION('d', 'abcdef')
```

This example returns 0 as the position of the number 9 in the character string 123456, because the number 9 is not found.

```
POSITION('9', '123456')
```

# **REPEAT**

This function repeats a specified expression n times.

#### Syntax 1 4 1

```
REPEAT(strExpr, integer)
```

#### Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of times to repeat the character string.

# **Example**

This example repeats abc four times:

```
REPEAT ('abc', 4)
```

### REPLACE

This function replaces one or more characters from a specified character expression with one or more other characters.

#### Syntax 5 4 1

```
REPLACE(strExpr1, strExpr2, strExpr3)
```

#### Where:

strExpr1 is any expression that evaluates to a character string. This is the string in which characters are to be replaced.

strExpr2 is any expression that evaluates to a character string. This second string identifies the characters from the first string that are to be replaced.

strExpr3 is any expression that evaluates to a character string. This third string specifies the characters to substitute into the first string.

#### Example

In the character string abcd1234, the characters 123 are replaced by the character string

```
Replace('abcd1234', '123', 'zz')
```

#### Result:

abcdzz4

# RIGHT

This function returns a specified number of characters from the right of a string.

#### **Syntax**

```
RIGHT(strExpr, integer)
```

#### Where:

strExpr is any expression that evaluates to a character string.

integer is any positive integer that represents the number of characters from the right of the string to return.

### Example

This example returns the three rightmost characters from the character string 123456:

```
SELECT right('123456', 3) FROM table
```

#### Result:

456

# **SPACE**

This function inserts blank spaces.

#### Syntax 1 4 1

SPACE (integer)

### Where:

*integer* is any positive integer that indicates the number of spaces to insert.

# SUBSTRING

This function creates a new string starting from a fixed number of characters into the original string.

### Syntax 1 4 1

```
SUBSTRING(strExpr FROM starting position)
```

#### Where:

strExpr is any expression that evaluates to a character string.

starting position is any positive integer that represents the number of characters from the start of the left side of the string where the result is to begin.

# TRIMBOTH

This function strips specified leading and trailing characters from a character string.

#### **Syntax**

TRIM (BOTH character FROM strExpr)

#### Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

# TRIMLEADING

This function strips specified leading characters from a character string.

# **Syntax**

TRIM(LEADING character FROM strExpr)

#### Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

# **TRIMTRAILING**

This function strips specified trailing characters from a character string.

### **Syntax**

TRIM (TRAILING character FROM strExpr)

#### Where:

character is any single character. If you omit this specification (and the required single quotes), a blank character is used as the default.

strExpr is any expression that evaluates to a character string.

# **UPPER**

This function converts a character string to uppercase.

### **Syntax**

UPPER(strExpr)

#### Where:

strExpr is any expression that evaluates to a character string.

# **Math Functions**

The math functions perform mathematical operations. Functions include:

**ABS** 

- **ACOS**
- **ASIN**
- **ATAN**
- ATAN2
- **CEILING**
- COS
- **COT**
- **DEGREES**
- **EXP**
- **EXTRACTBIT**
- **FLOOR**
- **LOG**
- LOG10
- **MOD**
- PΙ
- **POWER**
- **RADIANs**
- **RAND**
- **RANDFROMSEED**
- **ROUND**
- **SIGN**
- **SIN**
- **SQRT**
- **TAN**
- **TRUNCATE**

# **ABS**

This function calculates the absolute value of a numeric expression.

# **Syntax**

ABS (numExpr)

### Where:

<code>numExpr</code> is any expression that evaluates to a numeric value.

# **ACOS**

This function calculates the arc cosine of a numeric expression.

# **Syntax**

ACOS (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# **ASIN**

This function calculates the arc sine of a numeric expression.

### **Syntax**

ASIN (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# ATAN

This function calculates the arc tangent of a numeric expression.

### **Syntax**

ATAN (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# ATAN2

This function calculates the arc tangent of y/x, where y is the first numeric expression and *x* is the second numeric expression.

# **Syntax**

ATAN2 (numExpr1, numExpr2)

Where:

numExpr is any expression that evaluates to a numeric value.

# CEILING

This function rounds a noninteger numeric expression to the next highest integer. If the numeric expression evaluates to an integer, the CEILING function returns that integer.

#### **Syntax**

CEILING (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# COS

This function calculates the cosine of a numeric expression.

# **Syntax**

COS (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

# COT

This function calculates the cotangent of a numeric expression.

# **Syntax**

COT (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

# **DEGREES**

This function converts an expression from radians to degrees.

# **Syntax**

DEGREES (numExpr)

# Where:

numExpr is any expression that evaluates to a numeric value.

# **EXP**

This function sends the value to the power specified.

#### **Syntax**

EXP (numExpr)

#### Where:

numExpr is any expression that evaluates to a numeric value.

# **EXTRACTBIT**

This function retrieves a bit at a particular position in an integer. It returns an integer of either 0 or 1 corresponding to the position of the bit. The primary use case for this function is to extract 'cell status' in the Hyperion Financial Management cube source. The EXTRACTBIT function cannot be pushed into any database, and is always internally executed (in the Oracle BI Server).

#### **Syntax**

Int ExtractBit(Arg1, Arg2)

### Where:

*Arg1* is an expression of the following types: INT, SMALLINT, UNIT, SMALLUNIT, TINYINT, TINYUNIT. If Arg1 is of double type, it is necessary to cast the column to an INT first.

*Arg2* is an expression of type integer. The value should range from 1 to *length\_of\_Arg1*. 1 retrieves the Least Significant Bit. If the Arg2 is beyond the length of the integer, then 0 is returned. An error message is triggered when the Arg2 is less than 1.

# **FLOOR**

This function rounds a noninteger numeric expression to the next lowest integer. If the numeric expression evaluates to an integer, the FLOOR function returns that integer.

# Syntax 1 4 1

FLOOR (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# LOG

This function calculates the natural logarithm of an expression.

# **Syntax**

LOG (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# LOG<sub>10</sub>

This function calculates the base 10 logarithm of an expression.

#### **Syntax**

LOG10 (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# MOD

This function divides the first numeric expression by the second numeric expression and returns the remainder portion of the quotient.

#### Syntax 1 4 1

MOD (numExpr1, numExpr2)

Where:

*numExpr* is any expression that evaluates to a numeric value.

#### **Examples**

This example request returns a value of 0:

MOD(9, 3)

This example request returns a value of 1:

MOD(10, 3)

# Ы

This function returns the constant value of pi (the circumference of a circle divided by its diameter).

# **Syntax**

PI()

# **POWER**

This function takes the first numeric expression and raises it to the power specified in the second numeric expression.

### **Syntax**

POWER (numExpr1, numExpr2)

Where:

numExpr1 is any expression that evaluates to a numeric value.

# **RADIANS**

This function converts an expression from degrees to radians.

#### **Syntax**

RADIANS (numExpr)

Where:

numExpr is any expression that evaluates to a numeric value.

# **RAND**

Returns a pseudo-random number between 0 and 1.

### **Syntax**

RAND()

# RANDFROMSEED

Returns a pseudo-random number based on a seed value. For a given seed value, the same set of random numbers are generated.

# **Syntax**

RAND (numExpr)

Where:

*numExpr* is any expression that evaluates to a numeric value.

# **ROUND**

This function rounds a numeric expression to n digits of precision.

# **Syntax**

ROUND (numExpr, integer)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

integer is any positive integer that represents the number of digits of precision.

#### Example

This example returns 2.17 as the result.

```
ROUND(2.166000, 2)
```

# SIGN

This function returns the following:

- A value of 1 if the numeric expression argument evaluates to a positive number.
- A value of -1 if the numeric expression argument evaluates to a negative number.
- 0 (zero) if the numeric expression argument evaluates to zero.

## **Syntax**

SIGN (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

# SIN

This function calculates the sine of a numeric expression.

### **Syntax**

SIN (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

# **SQRT**

This function calculates the square root of the numeric expression argument. The numeric expression must evaluate to a nonnegative number.

### **Syntax**

SQRT (numExpr)

# Where:

numExpr is any expression that evaluates to a nonnegative numeric value.

# TAN

This function calculates the tangent of a numeric expression.

# **Syntax**

TAN (numExpr)

#### Where:

*numExpr* is any expression that evaluates to a numeric value.

# TRUNCATE

This function truncates a decimal number to return a specified number of places from the decimal point.

# Syntax

```
TRUNCATE (numExpr, integer)
```

#### Where:

numExpr is any expression that evaluates to a numeric value.

integer is any positive integer that represents the number of characters to the right of the decimal place to return.

### **Examples**

This example returns 45.12:

```
TRUNCATE (45.12345, 2)
```

This example returns 25.12:

TRUNCATE (25.126, 2)

# Calendar Date/Time Functions

The calendar date/time functions manipulate data of the data types DATE and DATETIME based on a calendar year. You must select these functions with another column; they cannot be selected alone. Functions include:

- **CURRENT\_DATE**
- CURRENT\_TIME
- CURRENT\_TIMESTAMP
- DAY\_OF\_QUARTER
- **DAYNAME**
- **DAYOFMONTH**
- **DAYOFWEEK**
- **DAYOFYEAR**
- **HOUR**
- **MINUTE**
- **MONTH**
- MONTH\_OF\_QUARTER
- **MONTHNAME**
- **NOW**

- QUARTER\_OF\_YEAR
- **SECOND**
- **TIMESTAMPADD**
- TIMESTAMPDIFF
- WEEK\_OF\_QUARTER
- WEEK\_OF\_YEAR
- **YEAR**

# CURRENT\_DATE

This function returns the current date. The date is determined by the system in which the Oracle BI Server is running.

### Syntax 1 4 1

CURRENT DATE

# CURRENT\_TIME

This function returns the current time. The time is determined by the system in which the Oracle BI Server is running.

# Syntax 1 4 1

CURRENT TIME (integer)

#### Where:

integer is any integer representing the number of digits of precision with which to display the fractional second. The argument is optional; the function returns the default precision when no argument is specified.

# CURRENT\_TIMESTAMP

This function returns the current date/timestamp. The timestamp is determined by the system in which the Oracle BI Server is running.

#### Syntax 5 4 1

 ${\tt CURRENT\_TIMESTAMP} \, (\, integer) \,$ 

#### Where:

integer is any integer representing the number of digits of precision with which to display the fractional second. The argument is optional; the function returns the default precision when no argument is specified.

# DAY\_OF\_QUARTER

This function returns a number (between 1 and 92) corresponding to the day of the quarter for the specified date.

#### **Syntax**

DAY OF QUARTER (dateExpr)

#### Where:

dateExpr is any expression that evaluates to a date.

# DAYNAME

This function returns the name of the day of the week for a specified date.

#### **Syntax**

DAYNAME (dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# DAYOFMONTH

This function returns the number corresponding to the day of the month for a specified date.

#### **Syntax**

DAYOFMONTH (dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# **DAYOFWEEK**

This function returns a number between 1 and 7 corresponding to the day of the week, Sunday through Saturday, for a specified date. For example, the number 1 corresponds to Sunday, and the number 7 corresponds to Saturday.

#### **Syntax**

DAYOFWEEK (dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# **DAYOFYEAR**

This function returns the number (between 1 and 366) corresponding to the day of the year for a specified date.

# **Syntax**

DAYOFYEAR (dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# **HOUR**

This function returns a number (between 0 and 23) corresponding to the hour for a specified time. For example, 0 corresponds to 12 a.m. and 23 corresponds to 11 p.m.

# **Syntax**

HOUR(timeExpr)

#### Where:

timeExpr is any expression that evaluates to a time.

# MINUTE

This function returns a number (between 0 and 59) corresponding to the minute for a specified time.

# **Syntax**

MINUTE(timeExpr)

#### Where:

timeExpr is any expression that evaluates to a time.

# **MONTH**

This function returns the number (between 1 and 12) corresponding to the month for a specified date.

# **Syntax**

MONTH(dateExpr)

#### Where:

dateExpr is any expression that evaluates to a date.

# MONTH\_OF\_QUARTER

This function returns the number (between 1 and 3) corresponding to the month in the quarter for a specified date.

# **Syntax**

MONTH OF QUARTER (dateExpr)

#### Where:

dateExpr is any expression that evaluates to a date.

# **MONTHNAME**

This function returns the name of the month for a specified date.

#### **Syntax**

MONTHNAME (dateExpr)

#### Where:

dateExpr is any expression that evaluates to a date.

### NOW

This function returns the current timestamp. The NOW function is equivalent to the CURRENT TIMESTAMP function.

#### Syntax

NOW ()

# QUARTER OF YEAR

This function returns the number (between 1 and 4) corresponding to the quarter of the year for a specified date.

#### **Syntax**

QUARTER\_OF\_YEAR(dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# SECOND

This function returns the number (between 0 and 59) corresponding to the seconds for a specified time.

#### Syntax 1 4 1

SECOND (timeExpr)

Where:

timeExpr is any expression that evaluates to a time.

# **TIMESTAMPADD**

This function adds a specified number of intervals to a specified timestamp, and returns a single timestamp.

In the simplest scenario, this function adds the specified integer value to the appropriate component of the timestamp, based on the interval. Adding a week translates to adding seven days, and adding a quarter translates to adding three months. A negative integer value results in a subtraction (such as going back in time).

An overflow of the specified component (such as more than 60 seconds, 24 hours, 12 months, and so on) necessitates adding an appropriate amount to the next component. For example, when adding to the day component of a timestamp, this function considers overflow and takes into account the number of days in a particular month (including leap years when February has 29 days).

When adding to the month component of a timestamp, this function verifies that the resulting timestamp has enough days for the day component. For example, adding 1 month to 2000-05-31 does not result in 2000-06-31 because June does not have 31 days. This function reduces the day component to the last day of the month, 2000-06-30 in this example.

A similar issue arises when adding to the year component of a timestamp having a month component of February and a day component of 29 (that is, last day of February in a leap year). If the resulting timestamp does not fall on a leap year, the function reduces the day component to 28.

These actions conform to the behavior of Microsoft SQL Server and the native OCI interface for Oracle Database.

#### **Syntax**

```
TIMESTAMPADD (interval, intExpr, timestamp)
```

#### Where:

interval is the specified interval. Valid values are:

- SQL TSI SECOND
- SQL TSI MINUTE
- SQL TSI HOUR
- SQL TSI DAY
- SQL TSI WEEK
- SQL TSI MONTH
- SQL TSI QUARTER
- SQL TSI YEAR

*intExpr* is any expression that evaluates to an integer value.

timestamp is any valid timestamp. This value is used as the base in the calculation.

A null integer expression or a null timestamp passed to this function results in a null return value.

#### **Examples**

The following query asks for the resulting timestamp when 3 days are added to 2000-02-27 14:30:00. Since February, 2000 is a leap year, the query returns a single timestamp of 2000-03-01 14:30:00.

```
SELECT TIMESTAMPADD(SQL TSI DAY, 3, TIMESTAMP'2000-02-27 14:30:00')
FROM Employee WHERE employeeid = 2;
```

The following query asks for the resulting timestamp when 7 months are added to 1999-07-31 0:0:0. The query returns a single timestamp of 2000-02-29 00:00:00. Notice the reduction of day component to 29 because of the shorter month of February.

```
SELECT TIMESTAMPADD(SQL_TSI_MONTH, 7, TIMESTAMP'1999-07-31 00:00:00')
FROM Employee WHERE employeeid = 2;
```

The following query asks for the resulting timestamp when 25 minutes are added to 2000-07-31 23:35:00. The query returns a single timestamp of 2000-08-01 00:00:00. Notice the propagation of overflow through the month component.

```
SELECT TIMESTAMPADD(SQL TSI MINUTE, 25, TIMESTAMP'2000-07-31 23:35:00')
FROM Employee WHERE employeeid = 2;
```

# TIMESTAMPDIFF

This function returns the total number of specified intervals between two timestamps.

This function first determines the timestamp component that corresponds to the specified interval parameter, and then looks at the higher order components of both timestamps to calculate the total number of intervals for each timestamp. For example, if the specified interval corresponds to the month component, the function calculates

the total number of months for each timestamp by adding the month component and twelve times the year component. Then the function subtracts the first timestamp's total number of intervals from the second timestamp's total number of intervals.

The TIMESTAMPDIFF function rounds up to the next integer whenever fractional intervals represent a crossing of an interval boundary. For example, the difference in years between 1999-12-31 and 2000-01-01 is one year because the fractional year represents a crossing from one year to the next (such as 1999 to 2000). By contrast, the difference between 1999-01-01 and 1999-12-31 is zero years because the fractional interval falls entirely within a particular year (that is, 1999). Microsoft SQL Server exhibits the same rounding behavior, but IBM DB2 does not; it always rounds down.

When calculating the difference in weeks, the function calculates the difference in days and divides by seven before rounding. Additionally, the function takes into account how the parameter FIRST\_DAY\_OF\_THE\_WEEK has been configured in the NQSConfig.INI file. For example, with Sunday as the start of the week, the difference in weeks between 2000-07-06 (a Thursday) and 2000-07-10 (the following Monday) results in a value of 1 week. With Tuesday as the start of the week, however, the function would return zero weeks since the fractional interval falls entirely within a particular week. When calculating the difference in quarters, the function calculates the difference in months and divides by three before rounding.

The Oracle BI Server pushes down the TIMESTAMPADD and TIMESTAMPDIFF functions to Microsoft SQL Server, Oracle Database, IBM DB2, and ODBC databases by default.

#### **Syntax**

TIMESTAMPDIFF(interval, timestamp1, timestamp2)

#### Where:

*interval* is the specified interval. Valid values are:

- SQL\_TSI\_SECOND
- SQL\_TSI\_MINUTE
- SQL\_TSI\_HOUR
- SQL\_TSI\_DAY
- SQL\_TSI\_WEEK
- SQL TSI MONTH
- SQL\_TSI\_QUARTER
- SQL\_TSI\_YEAR

timestamp1 and timestamp2 are any valid timestamps.

A null timestamp parameter passed to this function results in a null return value.

#### Example

The following example query asks for a difference in days between timestamps 1998-07-31 23:35:00 and 2000-04-01 14:24:00. It returns a value of 610. Notice that the leap year in 2000 results in an additional day.

```
SELECT TIMESTAMPDIFF
(SQL TSI DAY, TIMESTAMP'1998-07-31 23:35:00',TIMESTAMP'2000-04-01 14:24:00')
FROM Employee WHERE employeeid = 2;
```

# WEEK\_OF\_QUARTER

This function returns a number (between 1 and 13) corresponding to the week of the quarter for the specified date.

#### Syntax 5 4 1

WEEK\_OF\_QUARTER(dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# WEEK\_OF\_YEAR

This function returns a number (between 1 and 53) corresponding to the week of the year for the specified date.

# **Syntax**

WEEK\_OF\_YEAR(dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# YEAR

This function returns the year for the specified date.

### **Syntax**

YEAR (dateExpr)

Where:

dateExpr is any expression that evaluates to a date.

# **Conversion Functions**

The conversion functions convert a value from one form to another. You can also use the VALUEOF function in a filter to reference the value of an Oracle BI system variable. Functions include:

- **CAST**
- **IFNULL**
- TO DATETIME
- **VALUEOF**

# **CAST**

This function changes the data type of an expression or a null literal to another data type. For example, you can cast a customer\_name (a data type of Char or Varchar) or birthdate (a datetime literal). The following are the supported data types to which the value can be changed:

```
CHARACTER, VARCHAR, INTEGER, FLOAT, SMALLINT, DOUBLE PRECISION, DATE, TIME,
TIMESTAMP, BIT, BIT VARYING
```

Depending on the source data type, some destination types are not supported. For example, if the source data type is a BIT string, the destination data type must be a character string or another BIT string.

Use CAST to change to a DATE data type. Do not use TO DATE.

The following describes unique characteristics of the CHAR and VARCHAR data types:

- Casting to a CHAR data type. You must use a size parameter. If you do not add a size parameter, a default of 30 is added. Syntax options appear in the following list:
  - The recommended syntax is:

```
CAST (expr | NULL AS CHAR(n))
```

# For example:

CAST (companyname AS CHAR (35))

You can also use the following syntax:

```
CAST (expr | NULL AS data type)
```

#### For example:

CAST (companyname AS CHAR)

**Note:** If you use this syntax, the Oracle BI Server explicitly converts and stores as CAST (expr | NULL AS CHAR (30))

Casting to a VARCHAR data type. You must use a size parameter. If you omit the size parameter, you cannot can save the change.

#### **Examples**

```
CAST(hiredate AS CHAR(40)) FROM employee
SELECT CAST(hiredate AS VARCHAR(40)), CAST(age AS double precision), CAST(hiredate
AS timestamp), CAST(age AS integer) FROM employee
CAST("db"."."table"."col" AS date)
```

# **IFNULL**

This function tests if an expression evaluates to a null value, and if it does, assigns the specified value to the expression.

#### Syntax 1 4 1

```
IFNULL(expr, value)
```

#### Where:

*expr* is the expression to evaluate.

*value* is the value to assign if the expression evaluates to a null value.

# TO\_DATETIME

This function converts string literals of dateTime format to a DateTime data type.

# **Syntax**

```
TO_DATETIME('string1', 'DateTime_formatting_string')
```

#### Where:

string1 is the string literal you want to convert

DateTime formatting string is the DateTime format you want to use, such as yyyy.mm.dd hh:mi:ss. For this argument, yyyy represents year, mm represents month, dd represents day, hh represents hour, mi represents minutes, and ss represents seconds.

### **Examples**

```
SELECT TO_DATETIME('2009-03-03 01:01:00', 'yyyy-mm-dd hh:mi:ss') FROM
snowflakesales
SELECT TO DATETIME('2009.03.03 01:01:00', 'yyyy.mm.dd hh:mi:ss') FROM
```

# VALUEOF

Use the VALUEOF function to reference the value of a repository variable. Repository variables are defined using the Administration Tool. You can use the VALUEOF function both in Expression Builder in the Administration Tool, and when you edit the SQL statements for an analysis from the Advanced tab of the Analysis editor in Answers.

# Syntax 1 4 1

Variables should be used as arguments of the VALUEOF function. Refer to static repository variables by name. Note that variable names are case sensitive. For example, to use the value of a static repository variables named prime begin and prime end:

```
CASE WHEN "Hour" >= VALUEOF("prime begin")AND "Hour" < VALUEOF("prime end") THEN
'Prime Time' WHEN ... ELSE...END
```

You must refer to a dynamic repository variable by its fully qualified name. If you are using a dynamic repository variable, the names of the initialization block and the repository variable must be enclosed in double quotes ("), separated by a period, and contained within parentheses. For example, to use the value of a dynamic repository variable named REGION contained in an initialization block named Region Security, use the following syntax:

```
SalesSubjectArea.Customer.Region = VALUEOF("Region Security"."REGION")
```

The names of session variables must be preceded by NQ SESSION, separated by a period, and contained within parentheses, including the NQ SESSION portion. If the variable name contains a space, enclose the name in double quotes ("). For example, to use the value of a session variable named REGION, use the following syntax in Expression Builder or a filter:

```
"SalesSubjectArea"."Customer"."Region" = VALUEOF(NQ_SESSION.REGION)
```

# **Database Functions**

Users and administrators can create requests by directly calling database functions from either Oracle BI Answers, or by using a logical column (in the logical table source) within the metadata repository. Key uses for these functions include the ability to pass through expressions to get advanced calculations, as well as the ability to access custom written functions or procedures on the underlying database.

Support for database functions does not currently extend across all multidimensional sources. Also, you cannot use these functions with XML data sources.

#### Functions include:

- **EVALUATE**
- **EVALUATE ANALYTIC**
- EVALUATE\_AGGR
- **EVALUATE PREDICATE**

# **EVALUATE**

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for scalar calculations, and is useful when you want to use a specialized database function that is not supported by the Oracle BI Server, but that is understood by the underlying data source.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

#### **Syntax**

```
EVALUATE('db function(%1...%N)' [AS data type] [, column1, columnN])
```

db function is any valid database function understood by the underlying data source.

data type is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from the input arguments. However, do not use this parameter for type casting; if the function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

column1 through columnN is an optional, comma-delimited list of columns.

# **Examples**

This example shows an embedded database function.

```
SELECT EVALUATE ('instr(%1, %2)', address, 'Foster City') FROM employees
```

# Examples Using EVALUATE\_AGGREGATE and EVALUATE to Leverage Unique **Essbase Functions**

The following examples use the EVALUATE AGGREGATE and EVALUATE functions. Note that expressions are applied to columns in the logical table source that refers to the physical cube.

Use EVALUATE AGGREGATE to implement custom aggregations. For example, you may want to compare overall regional profit to profits for the top three products in the region. You can define a new measure to represent the profits for top three products resulting in the Logical SQL statement:

```
SELECT Region, Profit, EVALUATE_AGGREGATE('SUM(TopCount(%1.members, 3, %2), %3)',
Products, Profit, Profit) Top_3_prod_Profit FROM SampleBasic
```

The Oracle BI Server generates the following expression for the custom aggregation:

```
member [Measures].[MS1] AS
'SUM(Topcount([Product].Generations(6).members, 3, [Measures].[Profit]), [Measures].[
Profit])'
```

Use the EVALUATE function on projected dimensions to implement scalar functions that are computed post-aggregation. EVALUATE may change the grain of the query, if its definition makes explicit references to dimensions (or attributes) that are not in the query.

For example, if you would like to see the Profits for the top five products ranked by Sales sold in a Region, after creating the applicable measure, the resulting Logical SQL statement is as follows

```
SELECT Region, EVALUATE('TopCount(%1.members, 5, %2)' as VARCHAR(20), Products,
Sales), Profits
FROM SampleBasic
```

The Oracle BI Server generates the following expression to retrieve the top five products:

```
set [Evaluate0] as
'{Topcount([Product].Generations(6).members,5,[Measures].[Sales]) }'
```

# **EVALUATE\_ANALYTIC**

This function passes the specified database analytic function with optional referenced columns as parameters to the back-end data source for evaluation.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

#### Syntax 1 4 1

```
EVALUATE_ANALYTIC('db_function(%1...%N)' [AS data_type] [, column1, column1))
```

#### Where:

db function is any valid database analytic function understood by the underlying data source.

data type is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from the input arguments. However, do not use this parameter for type casting; if the function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific analytic function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

column1 through columnN is an optional, comma-delimited list of columns.

### **Examples**

This example shows an embedded database analytic function.

```
EVALUATE_ANALYTIC('dense_rank() over(order by %1 )' AS INT, sales.revenue)
```

If the preceding example needs to return a double, then an explicit cast should be added, as follows:

```
CAST(EVALUATE ANALYTIC('Rank(%1.dimension.currentmember, %2.members)',
"Foodmart93"."Time"."Month" as Double)
```

# **EVALUATE AGGR**

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for aggregate functions with a GROUP BY clause.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

#### **Syntax**

```
EVALUATE AGGR('db agg function(%1...%N)' [AS data type] [, column1, columnN)
```

#### Where:

db agg function is any valid aggregate database function understood by the underlying data source.

data type is an optional parameter that specifies the data type of the return result. Use this parameter whenever the return data type cannot be reliably predicted from the input arguments. However, do not use this parameter for type casting; if the function needs to return a particular data type, add an explicit cast. You can typically omit this parameter when the database-specific function has a return type not supported by the Oracle BI Server, but is used to generate an intermediate result that does not need to be returned to the Oracle BI Server.

column1 through columnN is an optional, comma-delimited list of columns.

# **Example**

```
EVALUATE_AGGR('REGR_SLOPE(%1, %2)', sales.quantity, market.marketkey)
```

# **EVALUATE\_PREDICATE**

This function passes the specified database function with optional referenced columns as parameters to the back-end data source for evaluation. This function is intended for functions with a return type of Boolean.

The embedded database function may require one or more columns. These columns are referenced by %1 ... %N within the function. The actual columns must be listed after the function.

Note that EVALUATE PREDICATE is not supported for use with Essbase data sources.

### **Syntax**

```
EVALUATE_PREDICATE('db_function(%1...%N)', [, column1, columnN)
```

#### Where:

db function is any valid database function with a return type of Boolean that is understood by the underlying data source.

column1 through columnN is an optional, comma-delimited list of columns.

If you want to model a database function for comparison purposes, you should not use EVALUATE PREDICATE. Instead, use EVALUATE and put the comparison outside the function. For example, do *not* use EVALUATE PREDICATE as follows:

```
EVALUATE PREDICATE('dense rank() over (order by 1%) < 5', sales.revenue)
```

Instead, use EVALUATE, as follows:

```
EVALUATE('dense rank() over (order by 1%) ', sales.revenue) < 5
```

#### **Example**

```
SELECT year, Sales AS DOUBLE, CAST(EVALUATE('OLAP_EXPRESSION(%1,''LAG(units_cube_
sales, 1, time, time LEVELREL time_levelrel)'')', OLAP_CALC) AS DOUBLE) FROM
"Global".Time, "Global"."Facts - sales" WHERE EVALUATE_PREDICATE('OLAP_
CONDITION(%1, ''LIMIT time KEEP ''''1''', ''''2'''', ''''3'''', ''''4''''')
=1', OLAP_CALC) ORDER BY year;
```

# **System Functions**

The system functions return values relating to the session. Functions include:

- **USER**
- **DATABASE**

# **USER**

This function returns the user name for the Oracle BI repository to which you are logged on.

### **Syntax**

USER()

#### DATABASE

This function returns the name of the default subject area.

# **Syntax**

DATABASE()

# **User Interface Reference**

This appendix contains comprehensive reference information for each user interface item (dialogs, panes, editors, and so on). Topics are provided in alphabetical order by user interface item.

# Act As dialog

Use this dialog to select the user who you want to "act as"; that is the user whose account you want to access. You also use this dialog to return to your own user account after "acting as" another user. This dialog is available and includes a list of users only if you have been assigned the appropriate privilege and the administrator has configured this feature, as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For more information, see "Acting for Other Users".

# Components

#### User

Use this option to select the ID of the user whose account you want to access. Based on the system settings, a text box might be displayed in this dialog. Generally, this text box is displayed if a long list of users is returned. In this text box, enter the ID of the user that you want to act as.

# Stop

Use this button to stop accessing another user's account and to return to your own account.

# **Action Link dialog**

Use this dialog to add an action link to an initiative or objective in a Scorecard.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to Initiatives and Objectives in Scorecards"

# Components

# **State Equals**

Use this box to select the state of the initiative or objective under which the action link is to be enabled.

#### Action

Displays the action to be associated with the action link.

# **Create New Action**

Use this button to select the type of action that you want to create and display the "Add New Action dialog", where you create the action.

### **Select Existing Action**

Use this button to display the "Select Existing Action dialog", where you select an existing action.

#### **Link Text**

Use this field to enter the text to display as the link to execute the associated action.

# **Action Links dialog**

Use this dialog to add an action link to a KPI threshold range.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to KPIs"

# Components

#### **Action Links List**

Displays the action links that have been added to the KPI, including the text of the action links and the actions associated with the links.

#### **Add Action Link**

Use this option to display the "New Action Link dialog", where you create a new action link.

#### **Edit Action Link**

Use this button to display the "Edit Action Link dialog", where you edit the selected action link.

# **Remove Action Link**

Use this button to remove the selected action link.

# **Action Link Menu Properties dialog**

Use this dialog to set the properties of an action links menu on a dashboard page.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Dashboard Pages Using Action Link Menus"

# Components

#### Menu Label

Use this field to enter the text to display for the menu.

# Caption

Use this field to enter a caption to be displayed above the menu text.

#### **Action Links**

Displays a list of action links associated with the action links menu.

#### Add

Use this button to display the "Action Link Properties dialog", where you add an action link to the action links menu.

#### **Edit**

Use this button to display the "Action Link Properties dialog", where you edit the currently selected action link.

Use this button to delete the currently selected action link.

# **Notes**

Use the arrows to the right of the Action Links list to reorder the list of action links and change the order of how they will be displayed in the action link menu.

# **Action Link Properties dialog**

Use this dialog to set the properties of an action link on a dashboard page.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "About Adding Actions to Dashboard Pages"
- "Adding Actions to Dashboard Pages Using Action Links"
- "Adding Actions to Dashboard Pages Using Action Link Menus"
- "Editing Actions, Action Links, and Action Link Menus Added to Dashboard Pages"

# Components

#### **Link Text**

Use this field to enter the text to display as the link to execute the associated action.

# Caption

This field is available only for actions links that will not be displayed on an action link menu.

Use this field to enter a caption to display above the link text.

Displays the action to be associated with the action link.

### **New Action**

Use this button to select the type of action that you want to create and display the "New Action dialog", where you create an inline action. For more information on inline actions, see "What Are Inline Actions?"

#### Select Action

Use this button to display the "Select Existing Action dialog", where you select a named action. For more information on named actions, see "What Are Named Actions?"

#### Edit Parameter Mapping

This button is available only for named actions that have parameters that are not fixed or hidden.

Use this button to display the "Edit Parameter Mapping dialog", where you edit the action parameters. For more information on action parameters, see "What Are Action Parameters?"

# More (>>)

Displays these options for the currently selected action:

Edit Action — Use this option to display the "Edit Action dialog", where you edit an action.

- **Remove Action** Use this option to remove the action.
- Save Action As Use this button to display the "Save As dialog", where you save the action to the Oracle BI Presentation Catalog. If the action is an inline action, then the action is saved to the catalog rather than saved with the dashboard. If the action is a named action, then you can save the action with the same name or another name.

#### **Open Link in New Window**

This box is available only for Navigate to a Web Page and Navigate to BI Content actions.

Use this box to specify, for an action link that navigates to a URL or to other BI content, whether to open the link in a new browser window or new tab (if the browser supports tabs). Select this box to open the action link in a new browser window or tab. Deselect this box to open the action link in the same browser window or tab.

### Add to Briefing Book

This box is available only for Navigate to BI Content actions.

Use this box to specify whether the action associated with the action link can be executed in a briefing book, but only if the number of briefing book navigation links to be followed is greater than 0. (You set the number of briefing book navigation links to be followed in the "Save Briefing Book Content dialog" or in the "Page Properties dialog".)

If you select this box, then the action can be executed in a briefing book. A briefing book icon is displayed to the left of the action link on the dashboard page and in the briefing book to indicate that the action can be executed.

If you deselect this box, then the action cannot be executed in the briefing book.

See "Working with Briefing Books".

# **Show Link**

Use this box to specify one of the following options:

- **Always** Use this option to specify that the action link is always to be enabled.
- **Conditionally** Use this option to specify that the action link is to be enabled only if the associated condition is satisfied. Selecting this option displays the Condition area.

#### Condition

(Displayed only if the **Conditionally** option is selected.)

Use this area to specify the condition under which the action link is to be enabled. It includes the following components:

- **New Condition** Use this button to display the "New Condition dialog", where you create a new condition.
- **Select Condition** Use this button to display the "Select Condition dialog", where you select an existing condition.
- **More** (>>) Display these options:
  - **Test Condition** Use this button to test if the condition evaluates to true or false.

- Edit Condition Use this button to display the "Edit Condition dialog", where you edit the condition.
- **Remove Condition** Use this button to remove the condition.
- Save Condition As Use this button to display the "Save As dialog", where you save the condition to the catalog.

# **Action Options dialog**

Use this dialog to customize information to display to users when they execute an action.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

# Components

#### **Invoke Action**

Use the "Action Options dialog: Invoke Action tab" to:

- Specify whether to display a confirmation prompt to users when they execute the action
- Customize the dialog that is displayed to users when they need to supply action parameter values before the action is executed
- Customize the invocation successful message that is displayed to users
- Customize the invocation failure message that is displayed to users

#### **Action Results**

This tab is available only for Invoke a Web Service actions.

Use the "Action Options dialog: Action Results tab" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

# **Action Options dialog: Action Results tab**

Use this tab of the "Action Options dialog" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

# Components

# **Contains HTML Markup**

Use this option to work with HTML codes, as described in "Working with HTML Markup".

### Dialog Text

Use this field to enter the Web Service results information that you want to display to users.

#### **XPath Results**

Use this area to specify one or more XPath expressions to be used to extract values from the XML returned from the Invoke a Web Service action.

**Note:** Before specifying any XPath expressions, you need to know what the Web Service returns. You can find out what a Web Service returns by reading the Web Services Definition Language (WSDL).

To add an XPath Expression to the list, click the **Add XPath Expression** button. A row is added to the list, where you then specify the following information:

- In the Name column, enter a unique name for the XPath expression, for example, filename. You then can use this name to embed the XPath expression as a token in the dialog text, for example, @{filename}.
- In the **XPath Expression** column, enter the XPath expression. For example, if you know that the name of a file can be identified by the XPath expression "Body/writeToFileResponse/result", you enter Body/writeToFileResponse/result.
- In the **Default Value** column, enter the value to display when the XPath expression is not found in the action results. If you do not enter a default value and the XPath expression is not found, then an empty string is displayed.

**Note:** If multiple values for an XPath expression are found in the results, then only the first value is shown.

To delete an XPath expression from the list, select the XPath expression and click the **Delete XPath Expression** button.

# **Dialog Title**

Use this box to specify the title of the dialog, for example, Action Results.

# **Dialog Width**

Use this field to specify the width for the dialog. Specifying a width will cause the content to wrap and a scroll bar to be displayed, if necessary.

If you do not specify the width, then the dialog will be sized based on its content.

You might want to specify a width, for example, if the dialog text contains a long sentence without any explicit line breaks, which would result in a very wide dialog.

# Dialog Height

Use this field to specify the height for the dialog. Specifying a height will cause the content to wrap and a scroll bar to be displayed, if necessary.

If you do not specify the height, the dialog will be sized based on its content.

You might want to specify a height, for example, if the dialog contains extensive text, which would result in a very long dialog.

#### **Show Preview**

Use this button to preview how the dialog will look. (Note that this does not run the action.)

# Working with HTML Markup

Various dialogs and editors in which you can enter HTML codes include the Contains HTML Markup box. These dialogs and editors include the "Action Options dialog: Action Results tab", the "Edit Footer or Header dialog", the "Results tab: Narrative editor", the "Results tab: Static Text editor", and the "Text Properties dialog".

This option is available in the Action Options dialog: Action Results tab only if you have been granted the Save Actions containing embedded HTML privilege, and in the other dialogs and editors only if you have been granted the Save Content with HTML Markup privilege by the administrator.

Use this box to specify whether the text that you enter in the appropriate field contains HTML markup. (For example, in the Action Results tab, the field is labeled **Dialog** Text.) Check this box if the text contains HTML markup. Deselect this box if it contains only plain text. If the text contains HTML markup and you do not check this box, then the text is displayed as plain text.

You can add HTML that contains formatted text, and depending on the security settings of the servers, Active-X controls or Java scripts, sound bites, animation, a background image, and so on. The HTML code can contain anything that is supported by the browser.

Table B-1 contains usage notes and examples for several HTML elements. If you find an example in the table that is similar to what you want to do, then you can copy and paste the example, then tailor it to your needs.

Table B-1 Usage Notes and Examples for HTML Elements

| HTML Element               | Usage Notes and Examples  |
|----------------------------|---|
| Text                       | Any HTML tags can be used to control the format of the text. The following HTML tags are examples of some of the formatting you can apply.  |
|                            | <ul><li>To center the text in the section:</li></ul>  |
|                            | <center>Centered Text</center>  |
|                            | ■ To make the text bold:  |
|                            | <b>Bold Text</b>  |
|                            | ■ To set font size and color:   |
|                            | <font color="red" size="4">Red Text</font>  |
|                            | <ul> <li>You can also combine tags for additional effects:</li> </ul>   |
|                            | <center><b><font color="red">Bold Centered Red Text</font></b></center>   |
| Active-X object            | The Active-X object must be self-contained and supported by the browser. Paste or type the object into the HTML text window, ensuring that you include the beginning and ending tags <object> and </object> . |
| JavaScript and<br>VBScript | The script must be self-contained and supported by the browser. Paste or type the script into the HTML text window, ensuring that you include the beginning and ending tags <script> and </script> .          |
|                            | Specify the script language in the opening <script> tag, either <SCRIPT LANGUAGE="javascript"> or <SCRIPT LANGUAGE="vbscript">.</td></tr></tbody></table></script>  |

#### Table B-1 (Cont.) Usage Notes and Examples for HTML Elements

#### **HTML Element** Usage Notes and Examples

#### Audio

Ensure that you know where the audio clip is located. If the audio clip is for use in a shared environment, then it must be located on a network drive that is accessible to all users. Use the HTML tag <EMBED> to add audio in the dashboard. The following HTML code is an example:

<EMBED SRC="audio" AUTOSTART="true" LOOP="true"</pre> HIDDEN="true"></EMBED>

where "audio" is the location and name of the audio clip.

Note: You might need to adjust the HTML for the browser.

The following HTML tags are examples of the <EMBED> tag.

- To add an audio clip located on the hard drive, specify the following HTML code:
  - <EMBED SRC="c:\mycomputer\MIDIfiles\wakeup.mid"</pre> AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>
- To add the same audio clip from a shared location on the Web server, specify the following HTML code:
  - <EMBED SRC="/DashboardFiles/wakeup.mid" AUTOSTART="true" LOOP="true" HIDDEN="true"></EMBED>

## **Action Options dialog: Invoke Action tab**

Use this tab of the "Action Options dialog" to:

- Specify whether to display a confirmation prompt to users when they execute the action.
- Customize the dialog that is displayed to users when they need to supply action parameter values before the action is executed.
- Customize the invocation successful message that is displayed to users.
- Customize the invocation failure message that is displayed to users.

For more information, see:

- "What Are Actions?"
- "Specifying the Settings for New Actions"
- "Create New Action dialog"

## Components

#### **Run Confirmation**

Use this box to specify whether to display a confirmation prompt to users when they run the action. The confirmation prompt will include the text you enter as well as a **Yes** button to run the action and a **No** button to cancel the running of the action.

Select this box to display a confirmation prompt and then enter the text of the confirmation prompt in the field to the right. Deselect this box to not display a confirmation prompt.

#### Dialog Title

Use this box to customize the title of the dialog that is displayed to users when they need to supply action parameter values.

Select this box to customize the title and then enter the title in the field to the right. Deselect this box to use the default title **Invoke Action**.

#### **Action Help Text**

Use this box to specify the text of the dialog that is displayed to users when they need to supply action parameter values.

Select this box to specify the text and then enter the text in the field to the right. Deselect this box to use the default text Enter the values for action parameters and execute.

To embed a URL link within the text, use the token @{URL}. The URL link will be substituted for the token.

### **Link URL**

Use this box to specify whether to display a URL link below or within the text of the dialog that is displayed to users when they need to supply action parameter values. This allows you, for example, to display a link that navigates to a URL that provides more information about the action being executed.

Select this box to display a URL link below or within the text and then enter the URL in the box to the right. If the @URL token is embedded in the text, the URL (or URL label if provided) is displayed within the text. If the token is not embedded in the text, then the URL (or URL label if provided) is displayed beneath the text.

Deselect this box to not display a URL below or within the text.

#### Label

Use this field to enter the text to display for the URL link.

#### **Execute Button Text**

Use this box to customize the name of the button that is shown on the dialog that is displayed to users when they need to supply action parameter values, and that users click to execute the action once they have supplied parameter values.

Select this box to customize the name of the button and then enter the name in the box to the right. Deselect this box to use the default value **Execute**.

### **Successful Invocation Message**

This box is not available for some action types.

**Note:** For an Invoke a Web Service action, you can use the "Action Options dialog: Action Results tab" to customize a dialog to display information to users about the results of the action, if the action executed successfully.

Use this box to customize the message that is displayed to users when the action is successfully executed.

Select this box to customize the message and then enter the message in the field to the right. Deselect this box to use the default message Action invocation was successful.

#### **Invocation Failure Message**

This box is not available for some action types.

Use this box to customize the message that is displayed to users when the action is not successfully executed.

Select this box to customize the message and then enter the message in the field to the right. Deselect this box to use the default message Action invocation was unsuccessful.

## Add Application Roles, Catalog Groups, and Users dialog

Use this dialog to select the users, application roles, and Catalog groups to:

- Receive the delivery content of an agent.
- Have permission to access a section or alert section in a dashboard.
- Have permission to use a saved customization.
- Add or edit for an existing Catalog group.
- Assign permissions to a catalog object.

For more information, see:

- "Agent editor: Recipients tab"
- "Permission dialog"
- "Properties Buttons for Objects"
- "Saving Customizations"
- Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition

This dialog is also displayed as:

Add Groups dialog Edit Groups dialog Select User dialog

## Components

#### **Group Name**

Available only when working with Catalog groups. Enter the name that you want to use for this group.

### Location

Available only when you are working with catalog object permissions. Displays the catalog location of the object with which you are working.

#### **Available Members**

Use this area to:

- Initiate a search in the **Search** area.
- Select accounts to move to the **Selected Members** area.

#### Click to see effective permissions

Available only when you are working with catalog object permissions. Use this button to add the Permissions column to the Available Members list. This column displays the permissions that the corresponding application role, Catalog group, or user would have if you add them to the object for which you are assigning permissions. The effective permissions that display in the table are determined by the membership that the application role, Catalog group, or user has in the other roles, groups, and users already added to the Permissions dialog. For example, suppose that you have a catalog object called Report1 and you grant the BIAdministrator application role the

Full Control permission. Then you access the Add Application Roles, Catalog Groups, and User dialog to search for and add User A to the object's permission list. Since User A belongs to the BIAdministrator role, the effective permissions that displays for User A is Full Control.

#### **Search Binoculars**

Use this button to show and hide the **Search** area within the **Available Members** area.

#### Search area

Use this area to search for users, application roles, and Catalog groups.

To initiate a search, enter the string for which you want to search in the Name field; select either Application Roles, Catalog Groups, Users, or All and click the Search button. The results are displayed in the Available Members list.

#### Shuttle

Use these buttons move accounts between the available and selected areas.

#### **Selected Members**

Use this area to view the accounts that you have selected from the Available Members area and moved to the Selected Members area.

#### **Set Permission to**

Available only when you are working with catalog object permissions. Use this box to select the permission for the accounts that are listed in the **Selected Members** area. For more information about the options in this list, see "Permission Definitions" and "Permissions Available by Object Type".

# **Add Columns dialog**

Use this dialog to select the attribute or hierarchical column that you want to use as a dimension for the KPI.

## Components

## **List of Columns**

Displays the subject area's attribute and hierarchical columns that you can use as dimensions for the KPI. Use this list to select a column.

## **Related Topics**

"Creating or Editing KPIs"

## Add Comment dialog

Use this dialog to add new comments to or reply to existing comments attached to initiatives, objectives, and KPIs. (Remember that a comment is associated with a specific point of view.)

For more information, see:

"About Comments"

This dialog is also displayed as:

New Comment dialog Reply dialog

## Components

#### Subject

Use this box to enter the subject of the comment.

#### Comment

Use this box to enter your comment.

### History

This area is not available when the New Comment dialog is displayed from the "Collaboration pane".

Displays any comments that previously have been added to the initiative, objective, or KPI for the current point of view.

To expand or collapse the History area, click the **Expand All** or **Collapse All** button.

## **Notes**

Ensure that you save objectives, initiatives, and KPIs after adding new comments to or replying to existing comments attached to them.

# **Add Dashboard Page dialog**

Use this dialog to specify the name and description of the page that you are adding to a dashboard.

For more information, see "Adding New Pages to Dashboards".

## Components

## **Page Name**

Use this field to enter a name for the page.

## **Page Description**

Use this field to enter a description for the page.

## Add KPI dialog

Use this dialog to provide a label for a KPI usage or to pin (or set) the value of one or more KPI dimensions.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data will be controlled by the point of view settings.

You pin values of KPI dimensions, for example, when you add a KPI to one of the following tables:

- Initiatives & KPIs table in the "Analytics pane" of the "Scorecard editor: Initiative Details tab"
- Objectives & KPIs table in the in the "Analytics pane" of the "Scorecard editor: Initiative Details tab"
- New KPI Watchlist table in the "KPI Watchlist editor: Performance tab"

When you view the KPI, the data displayed is determined by the dimension values that you selected.

This dialog also displays as:

Edit Watchlist Entry dialog

## Components

#### **KPI Name**

Displays the name of the saved KPI that you are adding (for example, Revenue KPI).

#### **Subject Area**

Displays the name of the subject area that contains the KPI dimension or dimensions.

#### <Dimension>

This box is not available for a dimension whose value has been set in the KPI.

Use this box to specify a dimension value. Consider the following options:

- For all dimensions, you can select a column value or roll up value (for example, for the Dimensions.Geog dimension, you can drill and select North American, or drill further and select Los Angeles).
- Select **Point-of-View** to set no dimension value. If you use this option, at runtime a dimension field displays in the point of view area where the user can select a dimension value.
- For measures column, you can select **Use Variable** to set the dimension's value with either a session or repository variable. When you select this option, the "Select Variable dialog" displays. For more information about variables, see "Using Variables".

#### Label

Use this field to enter a user-friendly, descriptive KPI name to display in the watchlist or the Objectives & KPIs table.

**Tip:** If you select a specific value for a dimension, rather than the Use Point-of-View option, then enter a label that describes the pinning. For example, if you select Central for the Region dimension, you might enter **Sales Central Region**.

## Add a Related Document dialog

Use this dialog to add links to business intelligence objects and documents that are stored in the Presentation Services Catalog or web pages that provide additional information about or can be used in conjunction with the KPI.

## Components

#### Name

Use this field to enter the name of the link that will display in the related documents table. The user clicks this link to access the corresponding Web site, document, or business intelligence object.

### **Type**

Use this list to indicate how you want to provide the path to the related document.

- Select Catalog and click the Browse button to navigate to the document or business intelligence object in the catalog.
- Select **Link** and enter or paste the URL of the online document or business intelligence object.

### Catalog

This field displays if you select **Catalog** in the **Type** field.

Displays the location of the business intelligence object that you select from the catalog. To provide a location in this field, click the **Browse** button to access the "Select an Object from the BI Catalog dialog" and select a catalog object.

#### **Browse**

This option is available if you select **Catalog** in the **Type** field. Use this button to access the "Select an Object from the BI Catalog dialog" to browse the Presentation Services catalog and choose an object.

#### Link

This field displays if you select **Link** in the **Type** field.

Use to enter or paste the URL of the related object.

## Related Topics

"KPI editor: Related Documents page"

"Collaboration pane"

## Add/Remove Subject Areas dialog

Use this dialog to add or remove related subject areas from which to select columns.

For more information, see:

- "What Are Subject Areas and Columns?"
- "Specifying the Criteria for Analyses"
- "Creating or Editing Column Filters"
- "Creating or Editing a Column Prompt"

## Components

## **List of Subject Areas**

Displays the primary subject area and any related subject areas that you have permission to access. The primary subject area (which you select when you create a new analysis, a new named filter, or a new dashboard prompt) is always listed first.

A check mark beside a subject area identifies a related subject area that has already been added. A grayed-out check mark identifies the primary subject area or a related subject area whose data is currently being used in the analysis, named filter, or column prompt. You cannot remove a primary subject area. You can remove a related subject area only if its data is not currently being used.

Use this list to add or remove related subject areas. Check a related subject area to add it. Uncheck a subject area to remove it.

## Administration page

Use this page to administer Oracle BI Presentation Services. You perform administration tasks such as managing privileges and metadata for maps.

The functions of the Administration page are described in *Oracle Fusion Middleware* System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

#### **Product Information**

Use this collapsible section to see the following information about your installation of Oracle BI EE:

- **Product Version** Specifies the version number for Oracle BI EE.
- **Catalog Path** Specifies the complete directory name for the Oracle BI Presentation Catalog.
- **Oracle BI Server Data Source** Specifies the name of the data source that is specified in the Oracle BI Server.
- **Available Paging Memory (MB)** Specifies the amount of physical memory that is available plus any paging memory that is available. If this value is very low, then Oracle BI Presentation Services might run out of memory. Available for Windows systems only.
- **Available Virtual Address Space (MB)** Specifies the amount of virtual address space remaining to process. If this value is very low, then Oracle BI Presentation Services might run out of memory. Available for Windows systems only.
- **Replication** Indicates whether replication of the Oracle BI Presentation Catalog is enabled or disabled.
- **Maintenance Mode** Indicates whether Maintenance mode is turned on or off. You modify this setting using the **Toggle Maintenance Mode** link on this page. In maintenance mode, the catalog is read-only; no one can write to it.

### Manage Catalog Groups

Use this link to display the "Administration: Manage Catalog Groups page" in which you manage catalog groups.

#### Manage Privileges

Use this link to display the "Administration: Manage Privileges page" in which you view and administer privileges that are associated with various components. Privileges are actions that users have the right to perform.

#### **Manage Sessions**

Use this link to display the "Administration: Manage Sessions page" in which you view information about active sessions and about the cache for each analysis.

#### **Manage Agent Sessions**

Use this link to display the "Administration: Manage Agent Sessions page" in which you view information about currently active agent sessions that are triggered by Oracle BI Scheduler.

## Manage Device Types

Use this link to display the "Administration: Manage Device Types page" in which you create, edit, view or delete device types for use with agents.

## **Toggle Maintenance Mode**

Use this link to turn maintenance mode on or off. You can see the setting of the mode in the Product Information area. When Maintenance Mode is on, users cannot write to the Oracle BI Presentation Catalog.

#### Reload Files and Metadata

Use this link to reload XML message files, refresh metadata from the Oracle BI Server, and clear caches.

#### Issue SQL

Use this link to display the "Administration: Issue SQL page" in which you enter a SQL statement to run against the Oracle BI Server.

### Manage Map Data

Use this link to display the "Administration: Manage Map Data page" in which you manage layers, background maps, and images.

## Manage Marketing Jobs

Use this link to display the Marketing Job Management page in which you manage background jobs and the database cache.

## **Manage Marketing Defaults**

Use this link to display the Manage Marketing Defaults and Contact Planning Rules pages, in which you select the default Campaign Load File Format, the default Global Audience segment and the Profile Dashboard for each Target Level.

### Manage BI Publisher

Use this link to display the Administration page for BI Publisher where you can manage BI Publisher users, permissions, jobs, and files and folders.

For information, see Oracle Fusion Middleware Administrator's and Developer's Guide for *Oracle Business Intelligence Publisher.* 

## Administration: Issue SQL page

Use this page to enter a SQL statement to send directly to the Oracle BI Server. This feature is useful for testing the server only. Results are not formatted, and it is not possible to save the SQL statement that you issue here as an analysis.

For more information, see Appendix A, "Logical SQL Reference".

## Components

#### SQL

Use this field to enter a SQL statement to send directly to the Oracle BI Server.

#### Issue SQL

Click this button to send the SQL statement to the Oracle BI Server.

## **Logging Level**

Use this box to select the Oracle BI Server logging level, from 0 through 7. Each user receives a default logging level during user creation in the BI Server Administration tool. Select **Default** in this box to specify the use of your default level.

For information on logging levels, see Oracle Fusion Middleware System Administrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

### **Use Oracle BI Presentation Services Cache**

Use this box to specify whether to use the Oracle BI Presentation Services Cache. Clear this box to specify that you do not want the query to use the Presentation Services cache. In general, you should avoid clearing this box as disabling the cache has potential performance degradation issues.

## **Administration: Manage Agent Sessions page**

Use this page to view information about currently active agent sessions that are triggered by Oracle BI Scheduler.

For more information, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

### **Agent Sessions**

Displays a table with information about each agent session. You can see details such as the job identifier, the instance identifier, the primary agent, and the day and time at which the agent session was last accessed.

Click the **Sort** button at the top of various columns to sort the sessions. Click the link in the Primary Agent column to display the agent in the "Agent editor".

Click the **Expand** button to see the list of agents in that session.

## **Agents**

Displays a table with information about each agent. You can see details such as the path for the agent and its state. The state can be either Created, Populated, or Conditional Request Resolved.

Click the link in the Path column to display the agent in the "Agent editor". Click the **Expand** button to see the list of recipients for that agent.

### Recipients

Displays a table with the name and type of each recipient of the agent.

## **Administration: Manage Catalog Groups page**

Use this page to manage Catalog groups. These groups are for backward compatibility with previous releases only.

For more information, see Oracle Fusion Middleware System Administrator's Guide for *Oracle Business Intelligence Enterprise Edition.* 

## Components

## **Create a New Catalog Group**

Use this button to display the "Add Groups dialog", in which you create a new group.

### **Edit Selected Group**

After selecting a group in the list, use this button to display the "Edit Groups dialog", in which you edit an existing group.

### **Delete Selected Groups**

After selecting one or more groups in the list, use this button to delete the groups.

#### Name

Enter the name of a group that you need and click **Search** to display a list of groups that match that name. You generally need to use this field only when you have a very long list of groups and are having difficulty finding the one that you need.

## **More Groups**

Click this button to display either a list of additional groups or a message box that states that no other groups are available. Groups are displayed in lists of 25.

## **Administration: Manage Device Types page**

Use this page to create, edit, view or delete device types for use with agents. The types that are specified on this page can be selected on the "Create Device dialog" from the "My Account dialog: Delivery Options tab".

For more information, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

### **Device Type Name**

Displays the names of device types that are already created.

### Category

Displays the category of the device type, such as mobile phone, pager, or handheld device.

## **Create New Device Type**

Click this link to display the "Create New Device Type dialog".

## **Edit**

Click this button to display the "Edit Device Type dialog".

#### **Delete**

Click this button to begin the process of deleting the device type. A confirmation dialog is displayed in which you verify the deletion of the device type.

## **Administration: Manage Map Data page**

Use this page to administer maps and data, so that users can create map views. You perform administration tasks such as managing layers and background maps. Click **OK** when you have finished updating the page, to save your changes.

The functions of the Administration page are described in *Oracle Fusion Middleware* System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

#### Layers

Use this tab to work with the layers for display on a map.

### **Background Maps**

Use this tab to work with the main maps for use with map views.

### **Images**

Use this tab to specify the images for use with map views. You must specify images only if you want content designers to include them as part of formats on the map.

### Import

Use the import buttons on each tab to display a dialog in which you can import layers, background maps, or images to the tab.

#### **Edit and Delete**

Use the edit or delete button on each tab, after importing a layer, background map, or image to either display a dialog in which you can edit the item or delete it from the tab.

#### Sort

Use the sort buttons beside Name and Location on each tab to sort the layers, maps, or images.

## **Administration: Manage Privileges page**

Use this page to view and administer privileges that are associated with various components. Privileges control the rights that users have to access the features and functionality of Oracle BI Presentation Services.

The functions of the Administration page are described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

## **Privilege Table**

Use this table to:

- View privileges. The privileges are organized by categories (such as Access, Catalog, and so on). Users, roles, and Catalog groups who have explicit access to a privilege are identified to the right of each privilege.
- Administer a privilege by clicking the link for the users, roles, and groups who have explicit access to the privilege. Clicking the link displays the "Privilege dialog", where you can change the users, roles, and Catalog groups who are granted that privilege.

## **Administration: Manage Sessions page**

Use this page to view information about active sessions and about the cache for each analysis.

The functions of the Administration page are described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

#### Sessions area

Displays the total number of active sessions. Also displays a table that includes the following information about sessions that have been created for users who have logged in:

| Field        | Description   |
|--------------|---|
| User ID      | The name that the user entered when logging in.   |
| Host Address | The name or IP address of the computer that initiated the HTTP connection to the Web server. This could be a user's PC, a handheld device, a firewall, and so on.                 |
| Session ID   | A unique identifier assigned by Presentation Services for each client session.  |
| Browser Info | Information about the browser from which the user logged on.  |
| Logged On    | The time stamp on which the user logged on.   |
| Last Access  | The time stamp of the last activity for this user on Presentation Services. This can be any kind of activity on the system, such as switching from one dashboard page to another. |

## **Cursor Cache area**

Displays a table that includes the following information about each analysis:

| Field | Description   |
|-------|---|
| ID    | The unique internal cache identifier for this entry.  |
| User  | The name of the user who ran the analysis and last placed it into the cache. If two IDs are shown, then the second ID is impersonating the first. For example, the entry lhurley/administrator means that the Administrator account logged on and impersonated lhurley. This can happen when Oracle BI Scheduler starts an agent on someone's behalf. Oracle BI Scheduler logs on and impersonates that user so security and content filters still apply. |
| Refs  | The number of references to this entry since it was placed into the cache.  |

| Field         | Description   |
|---------------|---|
| Status        | The status of the analysis that is using this cache entry:  |
|               | ■ <b>Starting</b> — The analysis is starting to run.  |
|               | ■ Running — The analysis is currently running.  |
|               | ■ Finished — The analysis has finished.   |
|               | ■ <b>Queued</b> — The system is waiting for a thread to become available so the analysis can be processed.  |
|               | ■ Canceling — The application is in the process of canceling the analysis.  |
|               | ■ Error — An error was encountered during the processing or running of the analysis. Look in the Statement column for information about the error.  |
| Time          | The time taken to process and run the analysis, displayed in one-second increments. A value of 0s (zero seconds) indicates that the analysis took under 1 second to complete.   |
| Action        | The following links that you can click to affect the analysis:  |
|               | ■ Cancel — Terminates the analysis. Is displayed for in-progress analyses. The user running the analysis will receive an informational message indicating that the analysis was canceled by an administrator.   |
|               | ■ Close — Clears the cache entry associated with this analysis. Is displayed for completed analyses.  |
|               | ■ <b>View Log</b> — Displays the entry in the nQQuery.log file for this analysis (if logging is turned on for this user). This file logs query activity on the system at the individual user level.   |
|               | Query logging is turned off by default. It can be enabled for individual users at different logging levels. The administrator can use the Identity Manager to enable logging for a user.  |
|               | You can also view the nQQuery.log file (located by default in the Log directory in the Oracle Business Intelligence installation directory) using a text editor such as Windows Notepad. The administrator determines the maximum size of the nQQuery.log file by setting the USER_LOG_FILE_SIZE parameter in the NQSConfig.INI file. |
| Last Accessed | The time stamp of the last time the cache entry for this analysis was used to satisfy an analysis.  |
| Statement     | The SQL statement that was issued for the analysis; or if the analysis resulted in an error, information about the nature of the error.   |
| Information   | Usage tracking information (for example, what analysis contained the query).  |
| Records       | The number of records in the result set that have been seen (for example, 50+ to indicate that 50 records have been seen but there are additional records to be fetched or 75 to indicate that 75 records have been seen and there are no more records to be fetched).  |

## **Cancel Running Requests**

Use this button to cancel all requests that are running for analyses.

## **Close All Cursors**

Use this button to close all cursors, which removes all information in the Cursor Cache table.

## **Notes**

Use the arrow button beside each column heading to sort the table by that value.

# **Advanced SQL Filter dialog**

Use this dialog to edit the SQL code that is generated for a column filter.

For more information, see "Creating and Editing the SQL Statements for a Column Filter in an Analysis".

## Components

## **SQL**

Use this field to modify the SQL WHERE clause to be used as a filter. For descriptions of SQL clauses, see Appendix A, "Logical SQL Reference".

## **Related Topics**

"Creating or Editing Column Filters"

## **Advanced Ticker Options dialog**

Use this dialog to specify additional options for a scrolling ticker.

For more information, see

"Results tab: Ticker editor"

## Components

#### # of Loops

Use this field to enter the number of times that the results will scroll. The default is an infinite number of times.

You must specify a whole number.

#### **Scroll Amount**

Use this field to enter the number of pixels between successive redraws of the results.

### Scroll Delay

Use this field to enter the number of milliseconds between successive redraws of the results.

## **Background Color**

Use this field to enter the color to use for the background. Depending on what the browser supports, you can enter a color name, such as yellow or blue, or use the 6-digit hexadecimal format, such as #AFEEEE for pale turquoise. (You can omit the number sign character from the hexadecimal format.)

#### **Additional Marquee Attributes**

Use this field to enter other marquee options that the browser might support, such as ALIGN="top | middle | bottom" to align the ticker to the top, middle or bottom of the text around it. You can also add HTML to further customize the look of the ticker.

## **Agent editor**

Use this editor to create or edit an agent.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

#### Overview

Displays a summary of the current settings for the agent. Use the **Plus** and **Minus** buttons to expand and collapse this summary.

#### General

Use the "Agent editor: General tab" to specify the priority of the content that the agent is to deliver and how to send the delivery content

#### Schedule

Use the "Agent editor: Schedule tab" to specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

#### Condition

Use the "Agent editor: Condition tab" to specify whether the agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

For more information about conditions, see Chapter 9, "Working with Conditions."

#### **Delivery Content**

Use the "Agent editor: Delivery Content tab" to specify the content to deliver with the agent, such as a dashboard page or a saved analysis.

### Recipients

Use the "Agent editor: Recipients tab" to specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

## **Destinations**

Use the "Agent editor: Destinations tab" to specify where the content is to be delivered.

### **Actions**

Use the "Agent editor: Actions tab" to specify one or more actions to execute when the agent finishes.

For more information about actions, see Chapter 10, "Working with Actions."

#### **Toolbar**

The toolbar contains the following buttons:

- **Save this Agent** Use this button to save the agent.
- **Save this Agent as** Use this button to save a copy of the agent by another name.

- **Delete this Agent from the Catalog** Use this button to delete the agent.
- **Discard changes made to this page** Use this button to discard any changes you have made on the current tab.
- Run Agent Now Use this button to run the agent. This is helpful, for example, if you want to test the agent.

## Agent editor: Actions tab

Use this tab of the "Agent editor" to specify one or more actions to execute when an agent finishes.

You can specify actions to execute under the following circumstances:

- Only if the agent condition evaluates to true or if there is no condition associated with the agent
- Only if the agent condition evaluates to false

For more information, see:

- "What Are Agents?"
- "Creating Agents"
- Chapter 10, "Working with Actions"

## Components

## **Agent Condition True or No Condition Exists**

Use this area to specify one or more actions to execute only if the agent condition evaluates to true or if there is no condition associated with the agent.

### Agent Condition is False

This area is enabled only when a condition has been specified for the agent. See "Agent editor: Condition tab".

Use this area to specify one or more actions to execute only if the agent condition evaluates to false.

### Invoke per Row

This box is enabled only when a condition has been specified for the agent. It is not available for Invoke Server Script actions, Invoke Agent actions, or actions for which one of the parameters is a result set mapping.

Use this box to specify whether to execute the action for each row returned by the condition. Select this box to execute the action for each row. Deselect this box to execute the action only once, regardless of the number of rows returned.

## **Add New Action**

Use this button to display the "Create New Action dialog", where you create a new action.

## Add Existing Action

Use this button to display the "Select Existing Action dialog", where you select an existing action.

#### **Edit Action**

Use this button to display the "Edit Action dialog", where you edit the selected action. For inline actions, you can edit the action definition. For named actions, you can edit only parameter values.

## **Delete Action**

Use this button to delete an action.

## Agent editor: Condition tab

Use this tab of the "Agent editor" to specify whether an agent always delivers its content and executes its actions, or conditionally delivers its content and executes its actions.

To determine whether the agent delivers its content and executes its actions, you use a condition. (For more information on conditions, see Chapter 9, "Working with Conditions.")

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

#### Settings

Use this box to select one of the following options:

- Do Not use a Condition (always deliver content and run actions) Use this option to specify that the agent is always to deliver its content and execute its actions.
- **Use a Condition** Use this option to specify that the agent is to conditionally deliver its content and execute its actions.

#### Create

Use this button to display the "Create Condition dialog", where you create an inline condition.

#### **Browse**

Use this button to display the "Select Condition dialog", where you select a named condition.

#### **Edit Condition**

This button is available only if you created an inline condition.

Use this button to display the "Edit Condition dialog", where you edit an inline condition. (You cannot edit named conditions.)

#### Customize

This button is available only if you selected a named condition that is based on an analysis that includes one or more prompted filters.

Use this button to display the "Customize Condition dialog", where you can customize the condition.

#### **Test Condition**

Use this button to test whether the condition evaluates to true or false.

### Save To Catalog

This button is available only if you created an inline condition.

Displays the "Save As dialog", where you save the condition to the catalog as a named condition.

## Agent editor: Delivery Content tab

Use this tab of the "Agent editor" to specify the content to deliver with the agent, such as a dashboard page or a saved analysis. You can also specify:

- The delivery format for the content, such as HTML, PDF, XLS, CSV, or text
- A subject line to include with the content
- A text message to provide context for an agent attachment
- A narrative text description of the conditional analysis (but only when you specify that the conditional analysis is also the delivery content)
- An explanation to deliver when an agent is to be delivered conditionally and the condition evaluates to false

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

### Subject

Use this field to enter the subject line for the agent.

#### Content

Use this box to select the type of content to deliver:

- **Analysis** Use this option to deliver saved analyses (shared and private).
- **Dashboard Page** Use this option to deliver dashboard pages from My Dashboard or dashboard pages from public (shared) dashboards.
- **Briefing Book** Use this option to deliver a briefing book.
- **Condition Analysis** This option is available only if you have specified a condition on the Conditions tab. Use this option to deliver the results of the analysis on which the condition is based.

**Note:** If you attempt to clear the content or select different delivery content, and you have selected the option to show only relevant rows to each user on the "Agent editor: Recipients tab", then a message is displayed. The message alerts you that the option to show relevant rows will be reset if you proceed with clearing the content or selecting different delivery content. Click Yes to proceed, or No to retain the current delivery content choice. If you click **Yes**, then the recipients will still be determined from the conditional analysis, but users will receive all content, and not only the content that pertains to them.

Use this button to display the "Choose Delivery Content dialog", where you select the content.

#### Customize

(This button is not available if you have specified **Condition Analysis** as the delivery content. Instead, the customizations specified on the Conditions tab will be used.)

Use this button to display the "Customize Delivery Content dialog", where you customize the content to be delivered.

#### Clear

Use this button to remove content previously selected.

#### **Format**

Use this box to select the format in which to deliver the content. The format options depend upon the type of delivery content. The format options are:

- (**Device default**) Uses the device default to determine the content format.
- **HTML** Sends delivery content as HTML.
- **Plain Text** Sends delivery content in plain text format.
- **CSV data** Sends delivery content as a Comma Separated Value (CSV) attachment.
- Excel 2003+ Sends delivery content as an XLS attachment.
- **PowerPoint** Sends delivery content as a PPT attachment.
- **PDF** Sends delivery content as a PDF attachment.
- Narrative Text (This option is available only if you have specified the Condition Analysis as the delivery content.) Sends a narrative description of the the results of the analysis on which the condition is based. If you select this option, a box is displayed in which you enter the narrative description to send. To include column *n* from the results in your text, use @*n*.)

## Delivery

Use this area to select whether to deliver the content directly or as an attachment:

- **Deliver Results Directly** This option is available only for these format options: (Device default), HTML (with the exception of dashboard pages), Plain Text, and **Narrative Text.** Use this option to deliver the content directly.
- **Deliver as Attachment** Use this option to deliver the content as an attachment.
  - If CSV data, Excel, or PDF is selected in the Format box, then this option is automatically selected.

If you select the **Deliver as Attachment** option, in the **Attachment Note** field, then enter a text message to provide context for the agent attachment.

#### Attachment Note

Use this field to enter a text message to provide context for the agent attachment.

#### If Condition is False

Use this area to specify whether to deliver a text message to recipients when there is no agent content to deliver to them. To deliver a text message, select **Deliver this Message** and then enter the text message to be delivered.

## **Notes**

- You can reference variables in the Subject, Attachment Note, and If Condition is False Deliver this Message fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".
- To use the @ character, precede it with the \ (backslash) character to separate it from the variable syntax. For example, Dear @{NQ\_SESSION.DISPLAYNAME}, \@ New York, is displayed as Dear Joe Smith, @ New York.

## Agent editor: Destinations tab

Use this tab of the "Agent editor" to specify where content is to be delivered.

For more information, see:

- "What Are Agents?"
- "How Agents Work"
- "What Are Alerts?"
- "Creating Agents"

## Components

## **Home Page and Dashboard**

Use this box to specify whether content is to be delivered to the Home page and dashboard pages.

#### Devices

Use this option to specify whether content is to be delivered to specified devices. If you select this option, then you must select one of the following options:

**Active Delivery Profile** — Use this option to specify that content is to be delivered to the devices specified in the active delivery profile.

The active delivery profile is configured through the "My Account dialog: Delivery Options tab".

- **Specific Devices** Use this option to specify that content is to be delivered to specific devices and then select one or more of the following device options:
  - **Email**
  - Pager
  - **Digital Phone**
  - Handheld Device

If you select a specific device here, then the default device selected in the My Account dialog: Delivery Options tab overrides the devices that are set in the active delivery profile for a user. Devices that are specified here are used instead of the devices specified in the active delivery profile. An agent, for example, need not be dependent upon a user's configuration. The agent can be configured to use device information from default devices in the Devices area in the My Account dialog: Delivery Options tab.

For more information about active delivery profiles and devices, see "Configuring Your Devices and Delivery Profiles".

## Oracle BI Server Cache (For seeding cache)

This option is available only for administrators who have been granted the Manage Catalog Groups privilege.

Use this option to specify whether to seed the cache.

Administrators can create Server cache for individual users. The cache seeding operation allows administrators to run analyses on dashboard pages or analyses that are stored in the catalog, and to create a Server cache. This speeds up response time for users when they actually run the analyses on the dashboards. If data already exists in the cache for a given analysis, then the data is deleted and refreshed when the agent

The cache for the analysis or the dashboard page is created at the appropriate schedule for the indicated set of users.

**Note:** To have the cache created for each user, select the **Run As Recipient** or **Specified User** box in the General tab.

Generally, if you are using the analysis that you have specified as the content for this agent to seed the cache, you will not select any other user destinations (such as Email).

## Agent editor: General tab

Use this tab of the "Agent editor" to specify the priority of the delivery content that an agent is to deliver and how to generate the delivery content.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

## **Priority**

Use this option to specify the priority of the delivery content — **High, Normal, Low**. The priority works with the delivery profile for a user to determine the destination for delivery content of different priorities.

For more information on delivery profiles, see "What Are Devices and Delivery Profiles?" and "Configuring Your Devices and Delivery Profiles".

#### Run As

Use this option to specify how to generate the delivery content (that is, what user to run the query as):

- **Recipient** Select this option to use the credentials of each recipient.
- **Specified User** This option is available only to the administrator. Select this option to use the credentials of a specified user. All recipients receive the same content as if they were the specified user. Then specify the user by typing the user's name in the box to the right of the option or by clicking the **Set User** button to display the "Select Business Owner dialog", where you can select a user.
- **Use Agent Owner's Credentials** This option is not available to administrators. Select this option to use the credentials of the agent owner. All recipients receive the same content as if they were the agent owner.

#### Created by

This information is displayed once the agent has been saved.

Displays the name of the person who created the agent.

#### **Last Modified**

This information is displayed once the agent has been saved.

Displays the date and time when the agent was last modified.

## Description

This information is displayed once the agent has been saved.

Displays the description of the agent that was provided when the agent was saved.

You can edit the description of the agent by navigating to the agent on the "Catalog page" and using the **Properties** option on the **More** menu.

## Agent editor: Recipients tab

Use this tab of the "Agent editor" to specify who is to receive the delivery content of the agent and who is allowed to subscribe to the agent.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

## **Select Recipients**

Use this area to view and specify who is to receive the delivery content of the agent.

To:

- Add users, application roles, and catalog groups, click the Add Recipient button to display the "Select User dialog", where you select the users, application roles, and catalog groups.
- Add e-mail recipients, click the **Add Email Recipient** button to display the "Enter Email Address dialog", where you enter their e-mail addresses.
- Delete a selected recipient, select the recipient in the list and then click the **Delete** button.
- Show only a particular set of selected recipients, use the **Show** box to select one of the following options: All, Users, Emails, Catalog Groups & Application Roles.

**Note:** When a user subscribes to and customizes an agent, if you then select the same user as a recipient, the user's customizations will be lost when the agent is next run.

#### Get Recipients from the Request Used in the Agent Condition

This box is enabled only if you have specified a condition that is based on an analysis for the agent. In addition, you must include the recipient information in the conditional result set (that is, you must include a column that contains who the recipient should be for each row).

Use this box to specify whether recipients are to be determined dynamically from the results of a conditional analysis. Select this box to have recipients determined dynamically from the results of a conditional analysis. Clear this box to have the recipients determined from the Select Recipients area.

**Note:** If you select the option to allow the recipients to be determined from the results of a conditional analysis and choose to show only relevant rows to each user, then it is assumed that you want the results of the conditional analysis set as the delivery content in the "Agent editor: Delivery Content tab". If the content has been set to something else (through clicking Clear or Browse), then a message is displayed asking if you want to update the delivery content to be the results of the conditional analysis. Click **Yes** to proceed and update the delivery content, or **No** to retain the current delivery content. If you click **No**, then the recipients will still be determined from the conditional analysis, but users will receive all content, and not only the content that pertains to them.

## Column Containing Recipients

This box is available only if the **Get Recipients from the Request Used in the Agent Condition** box is selected.

Use this box to select the column in the conditional analysis that contains the desired recipients.

## 2nd Column Containing Recipients (optional)

This box is available only if the Get Recipients from the Request Used in the Agent **Condition** box is selected.

Use this box to optionally select an additional column in the conditional analysis that contains desired recipients.

#### Only Return Rows Relevant to the User Running the Agent

This box is available only if the Get Recipients from the Request Used in the Agent **Condition** box is selected.

Use this box to specify whether only rows in the results that are relevant to the user running the agent are sent in the delivery content. Select this box to send only rows that are relevant to the user running the agent. Deselect this box to send all rows.

#### **Publish for subscription**

Use this box to specify whether the agent is to be published so that users can subscribe. Note the following:

- When you deselect the **Publish Agent for subscription** box, any selected subscribers are disabled, and the Allow Subscribers to Customize Agent box is cleared and disabled.
- You can only publish agents that have content and actions (if any) that can be shared.

For more information on how to subscribe to agents, see "Subscribing to Agents".

### **Allow Subscribers to Customize Agent**

This box is available only when the **Recipient** box is selected on the "Agent editor: General tab".

Use this box to specify whether subscribers can customize their subscription of the agent, for example, by providing values for a prompted filter associated with an analysis.

For more information on how to customize an agent subscription, see "Customizing Your Agent Subscriptions".

#### Agent Subscribers

Use this area to view and specify who is allowed to subscribe to this agent. In the list of agent subscribers, the **Name** column identifies the users, application roles, and catalog groups that are allowed to subscribe to the agent and the **Currently** Subscribed column identifies (with a check mark) those users, application roles, and catalog groups that are currently subscribed.

- Add users, application roles, and catalog groups that are allowed to subscribe to this agent, click the **Add Subscriber** button to display the "Select User dialog", where you select the users, application roles, and catalog groups.
- Delete a user, application role, or catalog group from the list of users, application roles, and catalog groups who are allowed to subscribe to the agent, select the user, application role, or catalog group in the list and then click the **Delete** button.
- To unsubscribe a user, application role, or catalog group that is currently subscribed to the agent, select the user, application role, or catalog group in the list and then click **Unsubscribe**.

**Note:** The **Unsubscribe** button is available only to administrators and users who have been granted the privilege Modify Current Subscriptions for Agents.

- Show only a particular set of users and groups who are allowed to subscribe to this agent, use the **Show** boxes. In the first box select the **All**, **Users**, or **Catalog** Groups & Application Roles, and in the second box select All, Unsubscribed, or **Subscribed**. To show:
  - All subscribed and unsubscribed users, application roles, and catalog groups, select All and All
  - All unsubscribed users, application roles, and catalog groups, select All and Unsubscribed
  - All subscribed users, application roles, and catalog groups, select All and Subscribed
  - All subscribed and unsubscribed users, select Users and All
  - Only unsubscribed users, select Users and Unsubscribed
  - Only subscribed users, select **Users** and **Subscribed**
  - All subscribed and unsubscribed catalog groups and application roles, select Catalog Groups & Application Roles and All
  - Only unsubscribed catalog groups and application roles, select **Catalog** Groups & Application Roles and Unsubscribed
  - Only subscribed catalog groups and application roles, select Catalog Groups & Application Roles and Subscribed

## Agent editor: Schedule tab

Use this tab of the "Agent editor" to specify whether the agent is to be run based on a schedule, how often it runs, and when its running is to start and end.

Agents can execute based on a specified schedule. You can define a starting date and time for the agent, a recurrence schedule, and an ending date.

You can also create a nonscheduled agent. This is useful when you want to create an agent that runs only as part of an agent chain, or an agent that is initiated by an external process.

For more information, see:

- "What Are Agents?"
- "Creating Agents"

## Components

#### **Enabled**

This box is disabled when the **Frequency** box is set to **Never**.

Use this box to specify whether to enable the agent to run as scheduled. This is useful if you have defined a schedule for an agent but find you want to stop it for a certain period of time.

You also can enable and disable an agent's schedule from the "Catalog page". See "Disabling and Enabling Agents' Schedules".

#### Frequency

Use this box to select one of the following options to specify how often the agent runs:

- **Never** Creates a nonscheduled agent.
- **Once** Runs the agent one time only.
- **Daily** Runs the agent on a daily schedule. If you select this option, then the following additional option is displayed:
  - **Days** Use this box to specify the daily interval, such as every 3 days.
- Weekly Runs the agent on a weekly schedule. If you select this option, then the following additional options are displayed:
  - Weeks —Use this box to specify the weekly interval, such as every 6 weeks
  - On Use this option to specify the days of the week, such as Monday and Friday
- **Monthly** Runs the agent on a monthly schedule. If you select this option, then the following additional options are displayed:
  - On Use this option to specify either the day occurrence (such as the first Tuesday or the first day of the month) or the day of the month.
  - **Months** —Use this box to specify the months, such as March, June, September, December.

#### Start

Use this box to specify the date and time to start the agent and the time zone. Click the **Select Date and Time** button to display the Select Date and Time dialog, where you select the date, time, and time zone.

## Re-run Agent Every

Use this box to specify whether to run the agent multiple times within a day. Select this box to run it multiple times within a day. Then enter the interval between executions (in minutes) and specify the time to stop the repetition by clicking the **Select Time** button to display a dialog in which to select the time.

Deselect this box to run it one time within the day.

#### **End**

Use this area to specify when to end the running of the agent:

- **No End Date** Use this option to specify that the agent is to be run indefinitely.
- **Select End Date** Use this option to specify an end date. Click the **Select Date** button to display the Select Date dialog, where you specify the date on which to end the running of the agent.

#### Notes

When you select the date and time, for time zones where daylight savings applies, the time zone reflects the daylight savings time. For example, if, during the summer months, you select (GMT) Greenwich Mean Time: Dublin, Edinburgh, Lisbon, London, this means BST (British Summer Time).

## Alert dialog

Use this dialog to:

- View information about an alert
- View the content of an alert
- Clear an alert
- Edit the agent that generated an alert, if you have permission to modify the agent
- Run the agent that generated an alert, if you have permission to execute the agent

For more information, see:

"What Are Alerts?"

"Accessing and Managing Your Alerts"

## Components

## **Alert Information**

Displays the following information:

- **Priority** Identifies the priority (**High**, **Normal**, or **Low**) of the alert.
- **Delivered** Identifies the last delivery date and time of the alert.
- **Recurrence** Identifies the number of occurrences of the alert.
- **Source Agent** Identifies the name of the agent that generated the alert and includes the following buttons:
  - **Edit Agent** (This button is available only if you have permission to modify the agent.) Use this button to display the agent that generated the alert in the "Agent editor", where you can edit the agent.
  - **Run Agent** (This button is available only if you have permission to execute the agent.) Use this button to run the agent that generated the alert.

#### **Alert Content**

Displays the content of the alert.

#### **Clear Alert**

Use this button to delete the alert.

## Alerts dialog

Use this dialog to:

- View a list of your alerts
- View the content for an alert
- Clear an alert
- Edit the agent that generated the alert, if you have permission to modify the agent
- Run the agent that generated the alert, if you have permission to execute the agent
- Subscribe to an RSS feed for alerts
- Clear all of your alerts

For more information, see:

- "Accessing and Managing Your Alerts"
- "Subscribing to an RSS Feed for Alerts"

## Components

#### **Alerts**

Displays a list of your alerts, including the name, priority (High, Normal, or Low), last delivery date and time, and number of occurrences for each alert.

To view the latest occurrence of an alert, click its name. The "Alert dialog" is displayed, where you can view information about the alert as well as the content of the alert. You can also edit and run the agent that generated the alert.

Each alert contains a toolbar that displays when you hover over the alert name. The toolbar contains the following buttons:

- **Edit Agent** (This button is available only if you have permission to modify the agent.) Displays the agent that generated the alert in the "Agent editor", where you can edit the agent.
- **Run Agent** (This button is available only if you have permission to execute the agent.) Use this button to run the agent that generated the alert.
- **Clear alert/Clear all recurrences of this alert** Use this button to delete the alert, or if the alert has recurrences, delete all recurrences of the alert.

#### Subscribe to RSS feed

Displays the browser's page that lets you subscribe to an RSS feed. Using this page, you can subscribe to an Oracle BI Alerts feed (that is, the channel that contains the delivered agents).

#### Clear All

Use this button to delete all alerts. When you clear all alerts, the Alerts! button in the global header and the Alerts area on the "Home page" are no longer displayed.

#### Refresh

Use this button to refresh the list of alerts.

## Analysis editor

Use this editor to create or edit an analysis. Analyses let you explore and interact with information by visually presenting data in tables, graphs, pivot tables, and so on. You can include the views that you create in an analysis for display in dashboards.

For more information, see:

- "What Is the Process for Constructing Analyses?"
- "Saving Analyses"

## Components

#### Criteria

Use the "Analysis editor: Criteria tab" to specify the criteria for an analysis, including columns and filters. You can work with selection steps after displaying the "Selection Steps pane".

#### Results

Use the "Analysis editor: Results tab" to create different views of the analysis results such as graphs, tickers, and pivot tables. You can also work with selection steps.

#### **Prompts**

Use the Analysis editor: Prompts tab to access the "Prompt editor" to create prompts that allow users to select values that dynamically filter all views within the analysis or all analyses on a dashboard.

#### Advanced

Use the "Analysis editor: Advanced tab" to examine or edit the XML code and logical SQL statement that is generated for an analysis.

## **Toolbar**

The toolbar includes the following buttons:

- **Save Analysis** Use this button to save an analysis.
- **Save As** Use this button to save an analysis as another name.

## **Related Topics**

"What Is the Analysis Editor?"

## **Analysis editor: Advanced tab**

Use this tab of the "Analysis editor" to examine or edit the XML code and logical SQL statement that is generated for an analysis. This tab is for use only by advanced users and developers who have the appropriate privileges. See "Examining the Logical SQL Statements for Analyses" for additional important information on working with this tab.

For more information, see:

- "Examining the Logical SQL Statements for Analyses"
- Appendix A, "Logical SQL Reference"

## Referencing the Results

Use this area at the top of the tab to access links that are identified with the name of the analysis and offer the following functions:

- Displaying individual pages that contain links for refreshing, modifying, and viewing the results of the analysis. You can bookmark these pages for use as links from other Web pages and portals.
- Generating and downloading a Web Query (.IQY) file, which allows you to work with the tables and pivot tables of the analysis in Microsoft Excel.

These links execute for the analysis as it is currently saved. If you update the analysis later, then the links are also changed for those updates. The links are not visible if you have not yet saved an analysis.

#### Analysis XML

Use this area to view and modify the XML code for an analysis.

**Caution:** Analyses are stored in the Oracle BI Presentation Catalog in XML format. If you change the XML code, then you change the analysis in the catalog.

Use the following components in this area:

- XML Code Box Use this box to view the XML code for the analysis and to enter any changes to that code.
- **Apply XML** Click this button to commit the XML code modifications that you made to the catalog.
- **Partial Update** Use this box to specify whether to update the SQL statement and HTML code only for views or for the entire analysis in response to an event.
  - Select either **Default** or **Affected Views** to update the SQL statement and HTML code only for the views that have been affected by an event such as drilling or sorting. These settings ensure better performance because the SQL statement and HTML code is generated only for affected views, which prevents the entire analysis from redrawing.
  - Select **Entire Report** to rebuild and redraw the entire analysis.
- Bypass Oracle BI Presentation Services Cache Use this box to specify whether you want the query to use the Oracle BI Presentation Services Cache. In general,

you should avoid selecting this box as enabling the cache has potential performance degradation issues.

#### SQL Issued

Use this read-only box to view the SQL statement that will be sent to the Oracle BI Server when the analysis is executed.

## **New Analysis**

Click this button to display the "Analysis Simple SQL Statement dialog", in which you create a new analysis using the SQL statement from the current analysis as the starting point. Any hierarchical columns, selection steps, groups, or formatting that are specified in the current analysis will be removed before the dialog is displayed. You can edit the SQL statement in this dialog.

#### **Advanced SQL Clauses**

Use this area to modify the SQL statement for an analysis. You can include additional SQL clauses and change the subject area or the FROM clause for certain analyses. All but one of these features are disabled for analyses that contain hierarchical columns, member selections, or groups. Only the ability to specify a prefix is enabled.

Use the following components in this area:

- **Issue an Explicit Distinct** Select this box to send a SELECT DISTINCT SQL statement to the Oracle BI Server. If you clear this box, then a simple SELECT command is sent to the Oracle BI Server. The SELECT DISTINCT command ensures that you obtain only unique results, with no duplicate values.
- **FROM** Enter either the name of the subject area to use for the analysis or enter a complex FROM clause.
- **GROUP BY** Enter a comma-separated list of columns from the analysis to use in a GROUP BY command.
- **Prefix** Enter any SQL statements to be run before the SQL statement for the analysis runs. For example, you can modify the values of session variables.
- Postfix Enter any additional SQL clauses that you would like to include with the analysis, including a full SQL statement. For example, you can affect the SQL statement for the analysis by entering JOIN, UNION, or ORDER BY commands. If you include an ORDER BY command, then you override any ORDER BY commands from the SQL statement for the analysis.
  - In general, only enter statements for **Postfix** if you are very familiar with SQL code.
- **Apply SQL** Click this button to commit the SQL statement modifications that you made. Use care when clicking this button. When you do, Oracle BI EE essentially creates a new analysis based on the SQL statement that you have added or modified. Therefore, you will lose all views, formatting, and so on that you had previously created for the analysis. The XML code will also be modified for the new analysis.

#### **Notes**

- You can also enter SQL statements using the "Administration: Issue SQL page".
- To combine an analysis with a similar analysis from the same subject area or another subject area, where you can perform Set operations such as UNION or INTERSECT on the results, click the Combine results based on union,

intersection, and difference operations toolbar button on the "Selected Columns pane". For more information, see "Combining Columns Using Set Operations".

## **Analysis editor: Criteria tab**

Use this tab of the "Analysis editor" for:

- "Specifying the Criteria for Analyses"
- "Editing the Formula for a Column"
- "Formatting Columns in Analyses"
- "Creating or Editing Column Filters"
- "Working with Selections of Data"

## **Common Components**

## **Subject Areas**

Use the "Subject Areas pane" to select the columns and hierarchy levels for an analysis and to work with subject areas.

## Catalog

Use the "Catalog pane" to drag and drop objects from the catalog that you want to add to the analysis.

## **General Components**

Use the following components when you are not creating a direct database request.

#### Selected Columns

Use the "Selected Columns pane" to modify the columns and hierarchy levels that have been selected for an analysis.

#### **Filters**

Use the "Filters pane" to create new filters for an analysis.

## Selection Steps

Use the "Selection Steps pane" to create and modify steps for data selections. This pane is not visible until you click the button on the toolbar to display it.

#### **Toolbar**

The toolbar contains the following buttons:

- Show/Hide Filters pane Click this button to show and hide the "Filters pane".
- **Show/Hide Selection Steps pane** Click this button to show and hide the "Selection Steps pane".
- **Edit Analysis Properties** Click this button to display the "Analysis Properties dialog", where you specify properties for the entire analysis.

## **Direct Database Request Components**

Use the following components when you create a direct database request.

For more information, see "Working with Direct Database Requests".

#### **Connection Pool**

Enter the name of the connection pool for the database that is defined in the physical layer of the Oracle BI Administration Tool. A sample name is sql\_paint.

For information about connection pools, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

#### **SQL Statement**

Enter the SQL statement that you want to send directly to the database. Oracle BI Server security rules for data are bypassed and cannot be applied when you send a direct database request.

The statement that you execute is affected by the user name that is specified for this connection pool in the Oracle BI Administration Tool. You might find that not all columns from the database are returned to you, if the specified user name is not permitted to see them.

## Validate SQL and Retrieve Columns

Click this button to validate the SQL statement and retrieve any columns that you have specified in the request. The columns are displayed in the **Result Columns** area.

If any errors are returned from the database, then you will see them in the area below this button. See Oracle Database SQL Language Reference for information on resolving any errors.

## Bypass Oracle BI Presentation Services Cache

Use this box to specify whether to use the Oracle BI Presentation Services Cache. Select this box to specify that you do want the request to use the Presentation Services cache. In general, you should avoid selecting this box as enabling the cache has potential performance degradation issues.

#### **Result Columns**

Use this area to work with the columns that are returned, if any, from the valid SQL statement. This area includes each column name and data type with the following options:

- Column Properties Click this button to display the "Column Properties dialog", in which you modify the properties of the column. The "Column Properties dialog: Conditional Format tab" is not available in this case, because you cannot apply conditional formatting to a column that is returned via a direct database request.
- Edit Formula Click this button to display the "Change Aggregation Rule dialog", in which you modify the aggregation rule for the column.

To change which columns that are returned, modify and validate the SQL statement.

## **Analysis editor: Results tab**

Use this tab of the "Analysis editor" to create different views of the analysis results such as graphs, tickers, and pivot tables. For more information, see "Displaying the Results of Analyses".

## Components

## **Subject Areas**

Use the "Subject Areas pane" to select the columns and hierarchy levels for an analysis and to work with subject areas.

## Catalog

Use the "Catalog pane" to display objects from the catalog to use with views.

#### **Views**

Use the "Views pane" to create and modify views to work with analyses.

## **Compound Layout**

Use the "Compound Layout" to assemble different views for display on a dashboard and to create additional layouts.

## Selection Steps

Use the "Selection Steps pane" to create and modify steps for data selections.

## **Toolbar**

This toolbar contains the following buttons:

- **Print this analysis** Use this button to specify whether to print the views for the analysis as HTML or PDF.
- **Export this analysis** Use this button to select an option for exporting the views for the analysis. For information, see "Export Menu Options for Views and Results".
- **Schedule** Use this button to save the analysis and then display the "Agent editor", where you can create an agent from the analysis. For more information, see "Creating Agents from Analyses".
- Show how results will look on a Dashboard Use this button to preview how the edited view will look on a dashboard.

**Note:** If the **Show how results will look on a Dashboard** button is not available, then the administrator has suppressed its display.

- **Print Options** Use this button to display the "Print Options dialog", where you specify settings for printing.
- **Refresh the results of the current analysis** Use this button to refresh the results of the current analysis. Clicking this button does not bypass the Oracle BI EE server cache.

- **New View** Use this button to display a list of views from which you can select the view that you want to create. The view is added to the current compound layout.
- **New Group** Use this button to display the "New Group dialog", where you create a new group.
- New Calculated Item Use this button to display the "New Calculated Item dialog", where you build calculated items.
- Edit Analysis Properties Use this button to display the "Analysis Properties dialog", where you specify properties for the entire analysis.
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".
- **Create Compound Layout** Use this button to create a new instance of the compound layout. A new compound layout is displayed in a tab in the "Compound Layout" and contains only a title.
- **Copy Compound Layout** Use this button to create a copy of the current compound layout. The copy is displayed in a tab in the Compound Layout and contains the same views as the compound layout that you copied.
  - When you copy, you do not actually create additional copies of the analysis or its views. The analysis and views exist only once. Any changes that you make to the analysis or its views are reflected in the multiple instances of the compound layout.
- **Delete Compound Layout** Use this button to delete the current compound layout. The views on the layout are not deleted from the analysis. This button is not available if you attempt to delete the last compound layout in the analysis.
- Show/Hide Selection Steps Pane Use this button to show or hide the display of the "Selection Steps pane" in the Results tab.

## **Analysis Properties dialog**

Use this dialog to specify properties for the analysis.

For more information, see "Specifying the Criteria for Analyses".

## Components

## No Results Settings

Use this box to select the type of message (default or custom) that will be displayed if no results are returned from an analysis. You might see the message, for example, if you have a very restrictive filter placed on the columns in the analysis. You will not see the custom message if you simply create the analysis and include no columns.

#### Header

Edit the header to use for the custom message. Available only when you specify a custom message for **No Results Settings**.

## Message

Edit the message to use for the custom message. Available only when you specify a custom message for No Results Settings.

## **View for Text Delivery**

Use this box to manually control which compound layout, including its associated views, is sent to a particular destination. For more information, see "Customizing Views for Delivery to Agent Users".

#### **Placement of Added Members**

Use the buttons within this area as follows, to control how members are added to hierarchical columns in this analysis via selection steps:

- Within the Hierarchy: Does not display duplicate members within all hierarchies in the analysis. If the member is already in the view, within the hierarchy, then this setting is ignored. Applies only to level-based hierarchies.
- Outside the Hierarchy: Members are added at the bottom. Members, groups, and calculated items are added below the last members at the top level of the hierarchy, in the order in which they are added.

For more information on selection steps, see "Creating Selection Steps".

## **Analysis Simple SQL Statement dialog**

Use this dialog to enter simple SQL statements that you can use to easily create an analysis. This dialog is displayed from the following places:

- When you select **New** in the global header and select **Analysis** or when you click Analysis in the Create area of the Home page, then select Create Analysis from **Simple Logical SQL**. The dialog is displayed with no existing SQL statement.
- When you select **New Analysis** when examining the SQL statement for an existing analysis in the "Analysis editor: Advanced tab". The dialog is displayed using the SQL statement from the current analysis as a starting point.

For information, see "Creating New Analyses" and "Examining the Logical SQL Statements for Analyses".

## Analytics pane

Use this pane as follows:

- For an initiative or objective, to specify basic information about the objective, to identify the KPIs and other objectives that support and measure the performance of the objective, and to add action links.
- For KPI details, to view basic KPI settings as well as a graph that presents actual values and target values, to pin dimensions, and to run actions.

For more information, see:

- "Working with KPI Details"
- "Creating Initiatives"
- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab", the "Scorecard editor: Initiative Details tab" and the "Scorecard editor: Objective Details tab".

## Components for KPI Details

## **History**

Displays a graph that presents actual values and target values that enable you to view KPI performance over time or using dimensions selected from the following:

- The point of view area
- The **Dimensionality** area below the graph

The graph will only show multiple time periods if trending was enabled in the KPI's definition.

#### **Parent Initiative or Parent Objective**

Displays the name of the parent initiative or the parent objective whose progress is measured by the KPI.

## **Actions**

Displays the action links associated with each KPI performance level or range. Use to perform actions in response to the KPIs current performance state. (You add or edit the action links in the KPI definition. See "Adding Actions to KPIs" and "Editing Actions and Action Links Added to KPIs".)

#### **Performance**

Displays the following KPI values and data:

- **Value** The KPI value that was manually entered, calculated, or referenced from the subject area.
- **Variance** The amount by which the actual value differs from the target value.
- **Change** If you enabled trending, this is the value by which the current actual value differs from that from the previous period. For example, if the actual value for an "Annual Sales" KPI is 30000 and was 2650 last year, the change is 27350.
- **Target** The value that you want the KPI to achieve.

- % **Variance** The amount by which the actual value differs from the target value expressed as a percentage.
- % Change If you enabled trending, this is the value by which the actual value differs from that from the previous period, as a percentage.

## **Indicator Type**

Displays the following options to indicate whether the performance of the KPI drives other KPIs, or is affected by the performance of other KPIs, or other data or processes:

- **Undefined** Use this option to not define an indicator type.
- **Leading** Use this option to indicate that the performance of the KPI drives the performance of other KPIs. For example, a Sales KPI would lead a Profits KPI.
- **Lagging** Use this option to indicate that the performance of the KPI is affected by the performance of other KPIs, or by other data or processes.

## Perspective

Displays the perspectives available for the scorecard. Select the perspective with which to align the initiative or objective. For example, you might align an objective for Increased Product Sales with the Financial perspective.

For more information on perspectives, see "What Are Perspectives?"

## Dimensionality

Displays the dimensions associated with the KPI. Use this area to pin the dimensions.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data will be controlled by the point of view settings.

To pin a dimension, click the down-arrow button to the right of the dimension and select one of the following options:

- A specific value
- **Use Point-of-View** Use this option to use the value currently selected in the in the point of view area.
- Use Variable Use this option to display the "Select Variable dialog", where you specify a variable to use to set the value. For more information on variables, see "Using Variables".

## Components for Initiatives and Objectives

Displays the score for the initiative or objective in a gauge and numerically.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment".

#### **Parent Initiative or Parent Objective**

Displays the name of the parent initiative (for an initiative) or the parent objective (for an objective).

#### Start Date

This box is available only for initiatives.

Use this box to specify the date on which the initiative is to begin as well as the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

#### Due Date

This box is available only for initiatives.

Use this box to specify the date on which the initiative is due as well as the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

## **Completion Date**

This box is available only for initiatives.

Use this box to specify the date on which the initiative was actually completed as well as the time zone. To select a date, click the **Select Date** button to display the Select Date dialog.

#### Children

Displays for the initiative or objective:

- The number of its child initiatives or child objectives in each assessment range.
- The number of its child KPIs in each assessment range.

If there is at least one child objective, initiative, or KPI for a particular status value, the status name is a hyperlink that drills to a dynamically created list of the child objectives, initiatives, and KPIs.

#### **Descendants**

Displays for the initiative or objective:

- The number of its descendant initiatives or objectives in each assessment range.
- The number of its descendant KPIs in each assessment range.

If there is at least one descendant objective, initiative, or KPI for a particular status value, the status name is a hyperlink that drills to a dynamically created list of the descendant objectives, initiatives, and KPIs.

#### **Perspective**

Displays the perspectives available for the scorecard. Select the perspective with which to align the initiative or objective. For example, you might align an objective for Increased Product Sales with the Financial perspective.

For more information on perspectives, see "What Are Perspectives?"

## **Assessment Formula**

Displays the following options to specify the rule to be used to assess the overall performance of the initiative or objective:

- **Worst case** Use this option to specify that the status of the worst performing child KPI or objective is to be used.
- **Best case** Use this option to specify that the status of the best performing child KPI or objective is to be used.
- Most Frequent (Worst Case) Use this option to specify that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the worst performing child KPI or objective.

- **Most Frequent (Best Case)** Use this option to specify that, if half the child KPIs and objectives have high performance and half have low performance, then use the status of the best performing child KPI or objective.
- **Weighted** Use this option to use a weighted average based on the weights you have assigned to the child KPIs and objectives.

## **Indicator Type**

Displays the following options to indicate whether the performance of the objective drives other objectives, or is affected by the performance of other objectives or other data or processes:

- **Undefined** Use this option to not define an indicator type.
- **Leading** Use this option to indicate that the performance of the objective drives the performance of other objectives. For example, an objective for Increased Sales would drive an objective for Increased Profits.
- **Lagging** Use this option to indicate that the performance of the objective is affected by the performance of other objectives or by other data or processes.

## **Priority**

This box is available only for initiatives.

Displays the options High, Medium, and Low to identify the importance and urgency of an initiative.

#### **Actions**

Displays the action links that have been added to an initiative or objective, including the text of the action links, the actions associated with the links, and under which states of the objectives or initiatives the action links are enabled.

Use this area to view and manage action links:

- To add a new action link, click the **New Row** button to display the "Action Link dialog".
- To edit an action link, select the link in the list and click the Edit Row button to display the "Action Link dialog".
- To delete an action link, select the link in the list and click the **Delete Row** button.

### Initiatives & KPIs or Objectives & KPIs

Use this table to view and manage:

- For an initiative, KPIs and other initiatives that are used to evaluate the performance of the initiative
- For an objective, KPIs and other objectives that are used to evaluate the performance of the objective

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

## Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table

The Initiative and KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and the New KPI Watchlist table displays initiatives, objectives, and KPIs as follows:

The **Initiatives & KPIs table** displays the child initiatives and the KPIs that are used to evaluate the performance of an initiative.

Use this table to view and manage the child initiatives and the KPIs that are used to evaluate the performance of the initiative.

To add a KPI, drag it from the "Catalog pane for Scorecard" and drop it on the table. The "Add KPI dialog" is displayed, where you pin dimension values or assign a label for this usage of the KPI.

The **Objectives & KPIs table** displays the child objectives and the KPIs that are used to evaluate the performance of an objective.

Use this table to view and manage the child objectives and the KPIs that are used to evaluate the performance of the objective.

To add a KPI, drag it from the "Catalog pane for Scorecard" and drop it on the table. The "Add KPI dialog" is displayed, where you pin dimension values or assign a label for this usage of the KPI.

The **Objectives**, **Initiatives & KPIs table** displays the initiatives, objectives, and KPIs that are associated with a perspective.

Use this table to view and manage the initiatives, objectives, and KPIs that are associated with the perspective.

The **New KPI Watchlist table** displays the KPIs in the watchlist.

Use this table to add KPIs to and manage KPIs in the watchlist.

To add a KPI, drag it from the "Catalog pane for Scorecard", "Strategy pane", "Initiatives pane", or the "Scorecard Documents pane" and drop it on the table. The "Add KPI dialog" is displayed, where you pin dimension values or assign a label for this usage of the KPI.

These tables contain the following components:

- **Objects** Displays these options:
  - **Open** This option is not available in the New KPI Watchlist table. Use this option to open the selected initiative, objective, or KPI.
  - **Open KPI Definition** This option is available only in the New KPI Watchlist table. Displays the "KPI editor", where you edit the selected KPI.
  - **Edit Watchlist Entry** This option is available only in the New KPI Watchlist table. Displays the "Edit Watchlist Entry dialog", where you edit the dimension values and label for the selected KPI.
  - **Delete** This option is not available in the New KPI Watchlist table. Use this option to delete the selected initiative, objective, or KPI.
  - **Remove KPI** This option is available only in the New KPI Watchlist table. Removes the selected KPI from the watchlist.
  - **Analyze** Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

**Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis may not persist after your Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Contact Owner** Use this option to display the "Contact Owner dialog", where you can send a message to the business owner of the selected initiative, objective, or KPI.
- **Add KPI** This option is available only in the Objectives & KPIs table and the Initiatives & KPIs table. Use this option to display the "Select a KPI dialog", where you select a KPI to add.
- **View** Displays these options:
  - Show More Columns Use this option to display the "Show More Columns dialog", where you add columns to or remove columns from the table. Table B–4 lists and describes the available columns.
  - **Change Column Labels** This option is available only in a New KPI Watchlist table. Use this option to display the "Change Column Labels", where you change the labels of the columns. Table B-4 lists and describes the available columns.
- **Summary** Displays, of the initiatives, objectives and KPIs that are used to evaluate the performance of this initiative, objective or KPI, the number that fall into each assessment range, for example, OK (2), Critical (1).
- **Red asterisk** (in a cell in the Status column) This symbol is available only if there are status overrides applied to an initiative, objective, or KPI. Use this symbol to display the "Status window", where you can view the overrides that previously have been applied or apply another override.
- Blue triangle (in the upper-right corner of a cell in the Status column as well as in other columns for a KPI) — This symbol is available only if there are comments attached to an initiative, objective, or KPI for the current dimension settings. Use this button to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment.
- Right-click menu in a column cell The options that are available depend on the tab in which the table is displayed and on the column in which you right-clicked, and can include the following:
  - **Action Links** Displays the action links that are available for the current status of the initiative, objective or KPI. Click a link to execute the action.
  - (for a cell in a KPI row only) **Open KPI** Displays the KPI details for the selected KPI (that is, the details are displayed in the "Scorecard editor: KPI Details tab").
  - (for a cell in a KPI row only) **Remove KPI** Use this option to remove the selected KPI from the KPI watchlist.
  - (for a cell in an initiative or objective row only) **Open Initiative** or **Open Objective** — Use this option to open the selected initiative or objective (that is, it is displayed in the "Scorecard editor: Initiative Details tab" or "Scorecard editor: Objective Details tab" in the current mode).

- (for a cell in an initiative or objective row only) **Delete Initiative** or **Delete Objective** — Use this option to delete the selected initiative or objective.
- (for a cell in a KPI row only) **Analyze** Use this option to create an analysis based on the selected KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

**Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis may not persist after your Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Contact Owner** Use this option to display the "Contact Owner dialog", where you compose a message to the business owner.
- (for a cell in the Status column only) **Add Comment** Displays the "Add Comment dialog", where you add a comment to an initiative, objective, or KPI for the current point of view.
- (for a cell in the Status column only) **Override Status** Displays the "Status Override dialog", where you override the status of an initiative, objective, or KPI for the current point of view.

## Status window

The Status window shows the following information:

- If you are working with comments, all the comments that have been added to and all status overrides that have been applied to an initiative, objective, or KPI for the current point of view.
- If you are working with status overrides, all status overrides that have been applied to an initiative, objective, or KPI for the current point of view.

Use this window to view and manage this information as follows:

- To add a new comment, click the **New Comment** button to display the "Add Comment dialog".
- To override a status, click the **New Override** button to display the "Status Override dialog".
- To expand or collapse all comments, click the **Expand All** or **Collapse All** button.
- To expand or collapse an individual comment, click the **Expand** or **Collapse** button.
- To reply to a comment, click **Reply** to display the "Reply dialog".
- To pin the Status window so that it stays open as you work, click the **Pin** button in the top-right corner of the window.

## **Apply Saved Filter dialog**

Use this dialog to specify how to add a named filter to the analysis with which you are working.

For more information, see:

- "Applying a Named Filter to an Analysis"
- "Creating or Editing Column Filters"

This dialog is also displayed with the following name, with fewer options that are read-only:

View Saved Filter dialog

## Components

## Clear all existing filters before applying

Use this option to remove all existing filters from the analysis before adding the named filter.

## Apply contents of filter instead of a reference to the filter

Select this option to add the filter as an inline filter. The filter is added to the "Filters pane", where you can edit it. Any changes that you make to the filter are saved with the analysis, but not to the catalog.

Clear this option to add the filter as a named filter. Clearing this option adds a reference to the filter (that is, add the filter as a named filter). The filter is added to the Filters pane, where you can view it but not edit it.

# **Archive dialog**

Use this dialog to specify if and how you want to apply the existing folder or object permissions when preparing the archive file. See "What is Archiving?"

## Components

## **Keep Permissions**

Use this option to maintain the existing permissions that determine access to the object. If you do not select this option, then the permissions for the highest-level parent folder are used.

## **Keep Timestamps**

Use this option to maintain the timestamps assigned to the object. If you do not select this option, then a timestamp of when the folder was archived is applied.

## **Notes**

Before you archive, ensure that the Archive\Unarchive privilege is assigned to your account.

## Bar Graph (Layer) dialog

Use this dialog to specify the formatting of bar graphs on a map view. The bar height varies with metric values. For pie graphs, the slice size varies as a percentage of the whole.

For more information, see "Editing Map Views".

This dialog is also displayed as:

Pie Graph (*Layer*) dialog

## Components

#### Name

Displays the name of the data column whose values will be displayed in graphs on the map and used as their labels.

## Name Automatically

Deselect this box to specify that you will enter the label for the graphs, rather than having the label specified automatically as the column name.

## **ToolTips**

Use this list to select the column whose name is used as the tooltip when you hover over a value of the data column on the map.

#### **Bar Size or Slice Size**

Use this list to specify the measure column whose values will control the size of the bars or slices, such as Dollars or Units.

#### **Graph Size**

Use this box to specify the size in pixels of each graph that is displayed on the map.

#### **Bars or Slices**

Use this list to select the attribute column whose values show as bars or slices in the graphs, such as Product or Channel.

For example, you can create pie graphs that have a slice for each Product. The size of the slice depends on the Dollars sold for that Product.

## **BI Publisher Report Properties dialog**

Use this dialog to specify the information for adding an Oracle BI Publisher report to a dashboard page.

For more information, see "Adding Oracle BI Publisher Reports to Dashboard Pages".

## Components

#### **Embedded Content**

Use this button to specify that the report is to be embedded in the dashboard, rather than displaying as simply a link to BI Publisher. This option is selected by default for reports.

For more information about embedded content, see "Adding Content to Dashboards".

## Width and Height

Use these fields to specify the width and height of the report on the dashboard, if the report is embedded.

#### Link

Use this box to specify that a link is to be displayed on the dashboard (rather than embedding the report in the dashboard). The text of the link is the name of the report. By clicking the link, you open the report in BI Publisher.

#### **View Latest Version**

Use this box to indicate, for a report that is scheduled, that you want the most recently generated version of the report to be displayed on the dashboard page.

- If this box is checked, then:
  - If there is a scheduled job associated with the report, then the report is not run again. The last saved output from the report is added to the dashboard page.
  - If there is no scheduled job associated with the report, then the report is run and the output from the report is added to the dashboard page.
- If this box is not checked, then the report is executed each time, regardless of whether there is a scheduled job associated with the report, and the output is added to the dashboard page.

# **Break dialog**

Use this dialog to add page and column breaks to the layout of a dashboard page. For more information, see "Properties Buttons for Objects".

## Components

#### No Break

Use this option to place the column next to the column that is above it.

#### Column Break

Use this option to place the column beneath the column that is currently to the left of it (or next to it).

## Page Break with Column Break

Use this option to place the column on another page in printed and PDF versions. This option also places the column below the column that it is next to, if you have not selected the **Column Break** option.

## Bubble (*Layer*) dialog

Use this dialog to specify the formatting of bubbles on a map. Bubble size represents the value of a metric. Bubble location indicates the geographic region. Bubbles, images, and shapes can apply to both polygon layers and point layers. Point layers cannot use a color fill format.

For more information, see "Editing Map Views".

This dialog is also displayed as:

Bubble (Custom Point Layer) dialog Color Fill (*Layer*) dialog Image (Custom Point Layer) dialog Image (*Layer*) dialog Variable Shape (Custom Point Layer) dialog Variable Shape (*Layer*) dialog

## Components

#### Name

Displays the name of the data column whose values will be displayed as bubbles, color fills, images, or shapes on the map and used as their label.

## Name Automatically

Deselect this box to specify that you will enter the label for the bubbles, color fills, images, or shapes, rather than having the label specified automatically as the column name.

## X (longitude) and Y (latitude)

Available only for the custom point layer and only if the **Single Column** box is not selected. Use this list to select the columns whose values will specify the longitude and latitude of the point that you want to represent on the map as a bubble, image, or shape.

You must specify different columns for longitude and latitude. These columns must store longitude and latitude values, values from a coordinate system that can identify a point, or address values that can be converted to longitude and latitude via the ETL system. The column values must adhere to the WGS84 coordinate system.

## Single Column

Use this box to indicate that the values from one column will specify the coordinates of the points that you want to represent on the map. The column is specified in the Location box.

#### Location

Available only for the custom point layer and only if the **Single Column** box is selected. Use this list to select the column whose values will specify the longitude and latitude of the point that you want to represent on the map as a bubble, image, or shape. Ensure that the column contains both longitude and latitude values.

#### Delimiter

Available only for the custom point layer and only if the **Single Column** box is selected. Use this box to enter the delimiter that is used in the single column that you specified in the **Location** box that holds the longitude and latitude values, such as a comma. This box has no default values. If you do not specify the proper delimiter, then the format cannot be displayed appropriately on the map.

#### **ToolTips**

Use this list to select the column whose name is used as the tooltip when you hover over a value of the data column on the map.

## Shape

Available only for shapes. Use this list to select the shape to include on the map. You can select Circle, Triangle, or Diamond.

## Vary Size By or Vary Color By or Vary Image By

Use this list to specify the measure column whose values will control the images, the color fills, or the size of the bubbles or shapes, such as Dollars or Units. For example, you can vary the color of the shapes by one measure column and the size of the shape by another measure column.

#### Minimum Size

Available only for bubbles and shapes. Enter the minimum size of the bubbles or shapes.

#### **Maximum Size**

Available only for bubbles and shapes. Enter the maximum size of the bubbles or shapes.

#### Color

Available only for bubbles and shapes. Use this list to select the color for the bubbles or shapes on the map. For bubbles, this box is disabled when you click Vary By **Measure**. When varying color by measure, you specify a palette of colors that corresponds to the binned values of the measure.

#### **Bin Type**

Use this list to select the type of grouping for the values to indicate via images or shapes. You can select one of the following types:

- Percentile Binning Group geographies by their rank, such as the top 33%. Percentile threshold values are specified automatically; you cannot modify them.
- Value Binning You specify the minimum and maximum values for each of the
- Continuous Color For color fill only. A gradient of color is varied and applied to the ranks of the geographies. You make no specifications for minimum and maximum values.

#### **Bins**

Use this list to select the number of bins for grouping the values to indicate via color fills, images or shapes. You can select various integers, Quartile (4), or Decile (10). The number of bins that you select corresponds to the number of colors that the map format shows.

## Style

Available only for shapes and color fills. Use this list to select the shape or gradient to display. The number of colors in the style depends on the number that is specified for Bins.

#### **Minimum and Maximum**

Use these boxes to enter the minimum, maximum, and other values for the bins. You can enter the values only if you select Value Binning for Bin Type. If you select Percentile Binning, then the values are specified automatically.

#### Label

Enter the labels for the bins. Labeling a bin helps users understand what a particular bin, or bucket, means. A label for the top quartile might say "Top Selling Products" instead of "Top 25%". You can customize these labels, and the map will provide automatic bin labels for particular types of data sets (percentage bins).

#### **Image**

Available only for images. Use this list to select the images for the bins. Click an image to display the "Select Image dialog" where you select the image for the bin. Images are shown at a latitude and longitude coordinate.

#### Color

Available only for color fill. Use this list to select the colors for the bins. Click a color to display a dialog where you select the color for the bin.

#### Allow Dashboard Users to Edit Thresholds

Available only for color fill when **Bin Type** is set to Percentile Binning or Value Binning. Select this box to display a slider component that allows end users to dynamically adjust threshold values. These adjustments allow users to perform visual analysis on their map data, which is sometimes referred to as "what-if analysis."

If you allow users to edit thresholds and they modify them, then the setting for **Bin Type** is automatically changed to Value Binning from any other settings.

For information, see "Modifying Thresholds for Formats on a Map View".

## Catalog page

Use the Catalog page to locate objects in the catalog and perform tasks specific to those objects. The objects and options that are available to you are determined by your system privileges and the permissions assigned to individual folders and objects.

Use the Catalog page to:

- Perform basic tasks. For example, open, copy, delete, search for objects, and create
- Move objects by dragging and dropping them to different locations within the catalog.
- Perform object-specific tasks. For example, assigning an agent or adding an object to a briefing book.
- Archive specific folders, objects, or the entire catalog.
- Set permissions on individual objects and folders.

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Searching with the Basic Search"
- "Object-Specific Tasks"

## Components

#### Folders pane

Use the "Folders pane" to display the catalog as a directory hierarchy or to display only those folders and objects that you created or that you marked as your favorites.

#### Search pane

Use the "Search pane" to provide search criteria and initiate a catalog search.

#### Catalog area

Use the "Catalog area" to view the results of your search, open folders to browse content, and initiate tasks specific to an object.

## Tasks pane

Use the "Tasks pane" to initiate tasks specific to an object.

## Preview pane

Use the "Preview pane" to preview the object that you selected in the Catalog area. This pane is not visible until you click the button to display it.

#### Toolbar

The buttons that are enabled for the toolbar vary between object types. The toolbar contains the following buttons:

**User View** — Defaults to **User View**. You can select **Admin View** if you have administrative permissions. Admin View allows you to perform all administrative

- tasks and access the catalog root folders, which provide detailed information about all users and system objects.
- **New** Use to create new objects. After you select the object to create, the object's editor displays where you can begin building the object.
  - If you have administrative permissions, then the New menu displays the Folder link that you can select to create a new catalog folder.
- **Refresh** Use to update the catalog with content or folder changes.
- **Up** Use to navigate to a parent folder or directory.
- **Show/Hide folders panes** Use to hide or show the Folders pane and Tasks
- **Search** Use to display the Search pane. Deselect this button to display the Folders pane.
- Change list view type Use this list to select how much information about folders and objects to display in the Catalog area.
  - **Descriptive** Select to display the object or folder's name, type, owner, and date modified and Expand, Open, Edit, and More links. This view allows you to perform tasks directly from the object's listing.
  - **Details** Select to display the object or folder's name, type, owner, and date modified.
  - **List** Select to display object and folder name, only.
- **View** Use to view the selected object. For example, if you select a report and click this button, the report viewer launches and shows you the report.
- **Edit** Use to modify a selected object using the associated editor or run a script, URL, or Web service action.
- **Print** Use to print the current page or the information in the Preview pane.
- **Export** Use to export a copy of an object or the object's data to a variety of formats (for example, PDF or XLS).
- **Delete** Use to remove a selected object or folder from the catalog.
  - When deleting shared folders or objects, be aware that other users who have added shared objects to their personal dashboards will no longer have access to them.
- **Copy** Use to copy a selected object or folder to paste in another directory.
- **Paste** Use to paste a copied object to another location.

## Location

Displays the directory path of a selected object. Use as a way to determine where you are within the directory structure.

## **Show Hidden Items**

Select to display all object-related settings and data such as system privileges, metadata, and cached data. When you select this option, hidden folders, including the following folders, are displayed: \_Portal, \_Filters, \_Prefs, \_Alerts, \_Agents, and \_ Delivers.

## Catalog area

Use this area to view your search results and browse business intelligence objects and folders. You can also use this pane to perform object-specific tasks and to move objects by dragging and dropping them to different areas within the Catalog. You can drag and drop objects within the Catalog area or from the Catalog area to the "Folders pane".

This area is part of the "Catalog page".

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Searching with the Basic Search"
- "Object-Specific Tasks"

## Components

## **Type**

Use this list to specify which object type to display in the catalog area. Selecting an object type applies only to the folder that you are viewing and not to the whole catalog. For example, if you are viewing content in the /My Folders location and select the Dashboard object type, only the dashboards within the /My Folders location display in the Catalog area.

#### Sort

This field displays if you selected either the **List** or **Descriptive** view type in the **Change list view type** list located in the "Catalog Page" toolbar.

Use this list to specify how you want to sort the objects in the Catalog area. By default, objects display in alphabetical order (A-Z). For example, you can select the Last Modified Ascending option to view the object chronologically.

#### **Show More Details**

This field displays if you selected the **Descriptive** view type in the **Change list view type** list located in the "Catalog Page" toolbar.

Use to display more information about specific object types. For example, if the Catalog pane listing contains agents and you select the **Show More Details** option, the information listed with the agent will include last run, next run, recipient, and priority information.

#### Object/Folder Links

Use to view a list of catalog objects and to initiate a specific tasks from an object. The way in which the objects display in this area (for example, list or details) is determined by the view type selection that you made in the **Change list view type** list located in the "Catalog Page" toolbar.

The tasks available for each object depend upon the object's type, the object's permissions, and your privileges. The tasks that display in the Catalog area also display in the "Tasks pane". For descriptions of these tasks, see "Tasks Options".

# Catalog pane

Use this pane to add objects from the Oracle BI Presentation Catalog to analyses, dashboards, and so on. The objects available for you to add depend on the task that you are performing. For example, if you are creating:

- A dashboard, you can add objects that are appropriate to add to a dashboard (such as pages, columns, analyses, and prompts) and for which you have appropriate permissions.
- An analysis, you can add filters, calculated items, and groups for which you have appropriate permissions.

This pane is displayed in numerous places, including the tabs of the "Analysis editor", the "Dashboard builder", and the "New Calculated Item dialog".

For more information, see:

- "Specifying the Criteria for Analyses"
- "Adding Content to Dashboards"

# Components

#### List

This box is not available in the Dashboard builder or the New Calculated Item dialog.

Use this box to select which objects to display in the Catalog Tree. The options can vary depending on whether the Catalog pane is displayed but can include the following:

- All —Use this option on the "Analysis editor: Criteria tab" to display all filters (for Criteria tab only), calculated items, and groups. On all other tabs of the Analysis editor, use this option to include all calculated items and groups.
- **Filters** Use this option to display only filters.
- **Calculated Items** Use this option to display only calculated items.
- **Groups** Use this option to display only groups.

#### Catalog Tree

Displays catalog objects that are appropriate for the task that you are currently performing and for which you have appropriate permissions.

Use this tree to:

- Add a filter, calculated item, and group to an analysis. To do so, select the filter, calculated item, or group and click the **Add More Options** button.
- Add an object to a dashboard. To do so, drag and drop the object to the "Page Layout area".
- Add a group or calculated item as a selection step. To do so, drag and drop the object to the appropriate column in the "Selection Steps pane".

#### **Toolbar**

This toolbar is available only in the Catalog pane displayed in the tabs of the Analysis editor.

The toolbar contains the following buttons:

- Add More Options Use this button to add a filter, calculated item, or group to the analysis. To do so, first select the object, and then click this button:
  - For a filter, the "Apply Saved Filter dialog" is displayed, where you specify how the filter is to be applied to the analysis.
  - For a group, the following options are displayed:
    - **Add** Use this option to add the group to the analysis. You will see an "Add: *group-name*" step in the Selection Steps pane. You will see an outline value for the group in a table or pivot table.
    - **Add Members** Use this option to add the members of the group to the analysis. You will see an "Add: Members of group-name" step in the Selection Steps pane. You will not see an outline value in a table or pivot table; you will see the members of the group.
  - For a calculated item, use this button to add the calculated item to the view.
- **View** This button is available only when you select a filter. Use this button to view information about the selected object. When you click this button, the appropriate view dialog displays. For example, from the "View Saved Filter dialog", you can view the filter's Catalog path and the syntax of the filter (for example, Region is equal to/is in EASTERN REGION; SOUTHERN REGION).
- **Edit** Use this button to edit the selected object.
- **Refresh** Use this button to refresh the objects that are displayed in the Catalog Tree. For example, if you cannot locate a specific saved filter, then click the Refresh button to display it in the Catalog Tree.

# Catalog pane for Scorecard

Use this pane to work with objects in the Oracle BI Presentation Catalog. For example, if you are creating an objective, you can add predefined KPIs to evaluate the objective's performance and progress by dragging and dropping KPIs from this pane to the objective.

For more information, see:

- "Creating Objectives"
- "Creating Initiatives"

This pane is part of the "Scorecard editor".

# Components

#### **Catalog Tree**

Displays catalog objects for which you have appropriate permissions.

Use this tree to work with the catalog objects. For example, you can add a KPI to an objective or initiative by dragging and dropping it, you can open a KPI, and so on.

#### **Toolbar**

The toolbar contains the following buttons:

- **Objects** Displays the following options:
  - **Open** Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)
  - **Cut** Use this option to remove the selected folder or object for pasting in another folder.
  - Copy Use this option to duplicate the selected folder or object and paste it in another folder.
  - **Paste** Use this option to paste the folder or object that you have cut or copied in another folder.
  - **Delete** Use this option to delete the selected folder or object.
- **View** Displays the option **System Objects**. Use this option to display system folders or objects in the Catalog Tree. (System folders or objects are those for which the system attribute is set in the "Properties dialog".)
- **New Object** Displays these options:
  - **New Folder** Use this option to create a new folder. To rename the folder, right-click the folder, select **Rename**, and enter a new name.
  - **KPI** Use this option to create a new KPI. When you select this option the Select Subject Area menu is displayed, where you select the subject area, and then the "KPI editor" is displayed.
  - **Create Agent** (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog", where you create an agent from the KPI.

- **Open** Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)
- **Delete** Use this option to delete the selected folder or object.
- **Refresh** Use this button to refresh the objects that are displayed in the Catalog Tree. For example, if you cannot locate a specific saved filter, then click the **Refresh** button to display it in the Catalog Tree.

# Causal Linkage dialog

Use this dialog to specify the strength of a cause and effect relationship, and how the values of one impact the values of the other.

For more information, see:

"Related Items pane"

# Components

### Strength

Use this box to specify whether the strength of the cause and effect relationship is Strong, Moderate, or Weak.

### **Proportionality**

Use this box to specify whether changes in performance or value in the cause and  $effect\ relationship\ are\ directly\ proportional\ (\textbf{Direct})\ or\ inversely\ proportional$ (Inverse).

# **Cause & Effect Map Preferences dialog**

Use this dialog to specify how cause and effect relationships are to be displayed on a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

# Components

#### General

Use the "Cause & Effect Map Preferences dialog: General tab" to specify which types of cause and effect relationships are to be displayed on a cause & effect map. You can also specify the slant of the lines that link objects as well as how many levels of the strategy hierarchy are to be displayed.

#### **Hidden Nodes**

Use the "Cause & Effect Map Preferences dialog: Hidden Nodes tab" to specify which objectives and KPIs on a cause & effect map are to be hidden.

# Cause & Effect Map Preferences dialog: General tab

Use this tab of the "Cause & Effect Map Preferences dialog" to specify which types of cause and effect relationships are to be displayed on a cause & effect map. You can also specify the slant of the lines that link objects as well as how many levels of the strategy hierarchy are to be displayed.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

# Components

### **Show Link Strengths**

Displays the following check boxes to specify which types of cause and effect relationships are to be displayed on the map:

- Strong Use this option to specify that strong cause and effect relationships are to be displayed.
- **Moderate** Use this option to specify that moderate cause and effect relationships are to be displayed.
- **Weak** Use this option to specify that weak cause and effect relationships are to be displayed.

### **Show Link Interactions**

Displays the following check boxes to specify whether only associated objectives and KPIs whose changes in performance or value are directly proportional to the objective are to be displayed on the map, or only associated objectives and KPIs whose changes in performance or value are inversely proportional to the objective are to be displayed on the map, or both:

- **Direct** Use this option to specify that only associated objectives and KPIs whose changes in performance or value are directly proportional to the objective are to be displayed.
- **Inverse** Use this option to specify that associated objectives and KPIs whose changes in performance or value are inversely proportional to the objective are to be displayed.

#### Link Angle

Use this box to specify the degree to which the lines that link objects on the map are to slant. To use straight lines, specify 0.

#### **Number of Levels**

Use this box to specify how many influencing, child objectives, to display on the map. This is helpful to reduce the visual complexity of the map.

#### Related Topics

"Cause & Effect Map Preferences dialog: Hidden Nodes tab"

# Cause & Effect Map Preferences dialog: Hidden Nodes tab

Use this tab of the "Cause & Effect Map Preferences dialog" to specify which objectives and KPIs on a cause & effect map are to be hidden.

You might, for example, want to hide some nodes so that you can view only the nodes for which you are the business owner.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

# Components

### Associated Objectives and KPIs (left pane)

Displays all objectives and KPIs that are associated with the objective or KPI that is the root of the map.

### Hidden Objectives and KPIs (right pane)

Displays all objectives and KPIs that are to be hidden on the map.

#### Shuttle

Use these buttons move objectives and KPIs between the two panes.

# Cause & Effect Map tab: Details tab

Use this tab of the "Scorecard editor: Cause & Effect Map tab" to specify supporting information for a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

# Components

#### Name

Displays the name of the cause & effect map.

### Description

Use this field to enter a description of the cause & effect map.

#### **Business Owner**

Displays the userID of the person responsible for managing the cause & effect map. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

#### **Objectives and KPIs**

Use this table to view and manage the objectives and KPIs that are displayed in the cause & effect map.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

#### **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the cause & effect map.

# **Related Documents area**

Displays the documents that provide supporting information to a scorecard object, such as an objective.

Use this area to view and manage the documents:

- To add a new document, click the New Row button to display the "New Related Document dialog".
- To edit document, select the document in the list and click the Edit Row button to display the "Edit Related Document dialog".
- To delete a document, select the document in the list and click the **Delete Row** button.

# Cause & Effect Map tab: Diagram tab

Use this tab of the "Scorecard editor: Cause & Effect Map tab" to create a diagram that illustrates the cause and effect relationships of an objective or KPI.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

# Components

#### Diagram

Use this area to drag and drop the objective or KPI whose cause and effect relationships you want to diagram.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

To display options that allow you to work with a node, right-click the node or click the Options button (on the right side of the node) to display the "Node Options Menu".

To display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

To edit a causal linkage, right-click the linkage line and select **Edit Causal Linkage**. The "Causal Linkage dialog" is displayed.

To delete a causal linkage, right-click the linkage line and select **Delete Causal** Linkage.

To zoom in and out of the diagram or to set preferences, use the toolbar buttons on the "Scorecard editor: Cause & Effect Map tab".

To work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".

To work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".

### Legend

Use the "Legend pane" to view the legend for the cause & effect map.

# **Change Aggregation Rule dialog**

Use this dialog to select the aggregation rule for a column when performing a direct database request. For more information, see "Working with Direct Database Requests".

# Components

### Column

Displays the name of the column for which you are changing the aggregation rule.

### **Aggregation Rule**

Use to select the aggregation rule for this column. In this dialog, Default indicates the default aggregation rule; that is, the rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository).

For a list of the valid values, see "Aggregation Rules and Functions".

# **Change Column Labels**

Use this dialog to change the labels of the columns (such as % Change) that are displayed in a KPI watchlist.

Table B–4, " Available KPI Data Columns" describes the available columns.

You can change the column labels in a stand-alone KPI watchlist or in a KPI watchlist that has been added to a scorecard. You cannot change the labels in a KPI watchlist that has been added to a dashboard.

For more information, see:

- "What Are KPI Watchlists?"
- "Creating or Editing KPI Watchlists"
- "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table"

# Components

#### Column

Use this box to enter a new label for the column. For example, you might want to change the % Change column label to Percent Change.

# **Choose Request Column dialog**

Use this dialog, when adding an inline action to an agent that will be conditionally executed based on an analysis, to select a column in the analysis whose value is to be used as the value of an action parameter.

For more information, see:

- "What Are Actions?"
- "Adding Actions to Agents"
- "Agent editor: Actions tab"

# Components

### **Columns**

Use this list to select the request column whose value is to be used as the value of an action parameter.

#### Name

Displays the name of the selected column.

### **Notes**

If the action is being executed per row, then the value from each row will be passed to the parameter; otherwise, the value from the first row will be passed.

# **Related Topics**

Chapter 9, "Working with Conditions" "Agent editor: Condition tab"

# **Collaboration pane**

Use this pane to identify information that is helpful for collaborating on KPI details, an initiative, or an objective, including the business owner, key resources, and related documents.

For more information, see:

- "Working with KPI Details"
- "Creating Initiatives"
- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab", "Scorecard editor: Initiative Details tab", and "Scorecard editor: Objective Details tab".

# Components

#### Comments

Displays the comments that have been added to the KPI, initiative, or objective. For more about comments, see "About Comments".

Use this area to view and manage the comments. Before you begin to work with comments, ensure that the point of view controls reflect the values for which you want to add or view comments.

To:

- Add a new comment, click the **New Comment** button to display the "New Comment dialog".
- Expand or collapse all comments, click the **Expand All** or **Collapse All** button.
- Expand or collapse an individual comment, click the **Expand** or **Collapse** button.

### **Business Owner**

Displays the userID of the person responsible for managing the initiative, objective, or KPI. To specify the business owner, click the Set User button to display the "Select Business Owner dialog", where you can search for and select the business owner.

#### **Related Documents**

(for KPI details) Displays links to documents that provide supporting information to the KPI. You added these links when you created or edited the KPI. For more information, see "Creating or Editing KPIs".

(for initiatives and objectives) Use the "Related Documents area" to view and manage documents that provide supporting information to the initiative or objective.

#### **Key Resources**

This area is available only for initiatives.

Displays the key resources for an initiative, that is the users who are working on an initiative.

Use this area to view and manage the key resources:

To add a new key resource, click the **New Row** button to display the "Key Resource dialog".

- To edit a key resource, select the key resource in the list and click the **Edit Row** button to display the "Key Resource dialog".
- To delete a key resource, select the key resource in the list and click the **Delete** Row button.

# **Color Selector dialog**

Use this dialog to specify the color in which the cells that contain the KPI's actual values are displayed. The color that you choose reflects the value's performance levels.

# Components

### **Color Samples**

Use these samples to select a color. When you select a color, a sample of the color and its hex value displays in the **Customizations** field.

### **Customizations**

Use this box to modify the selected color's hex value or enter the hex value corresponding to the desired color (for example, #FF0000 or #996600).

# **Related Topics**

"Creating or Editing KPIs"

# **Column Properties dialog**

Use this dialog to:

- Edit the properties for a column or hierarchy level to control the appearance and layout of a column or hierarchy level and its contents
- Specify formatting to apply only if the contents of the column or hierarchy level meet certain conditions
- Specify the interactions that are to occur when users click in a data view
- Set the properties of a column that affect write back

This dialog is also displayed as:

Hierarchical Level Properties dialog

For more information, see:

- Chapter 7, "Formatting Analyses, Views, and Dashboard Pages"
- "Adding Actions to Analyses"
- "Editing Actions and Action Links Added to Analyses"

# Components

#### Style

Use the "Column Properties dialog: Style tab" to format the content of columns and hierarchy levels.

#### **Column Format**

Use the "Column Properties dialog: Column Format tab" to modify how folder and column headings are displayed in the analysis and to specify how repeated values display in the column.

#### **Data Format**

Use the "Column Properties dialog: Data Format tab" to override the data's default display characteristics.

#### **Conditional Format**

Use the "Column Properties dialog: Conditional Format tab" to add a condition, or filter, to the column or hierarchy level.

#### Interaction

Use the "Column Properties dialog: Interaction tab" to specify what you want to happen when the user clicks a value for a column or hierarchy level.

#### Write Back

Use the "Column Properties dialog: Write Back tab" to set the properties of a column that allows for writing back values from a table.

#### Save As Default

Use this button to affect the default property settings for columns and hierarchy levels, based on the specifications in this dialog. You need the appropriate privileges to save the properties as a systemwide default.

- Select **Restore properties defaults** to return the property values for the column or hierarchy level back to the last saved default values.
  - To restore the defaults that were shipped with the product, you must manually delete the default formats file from the Oracle BI Presentation Catalog.
- Select **Save as the system-wide default for <name>** to save these properties as the systemwide default for this column or hierarchy level in all analyses in which it is used.
- Select Save as the system-wide default for this data type to save these properties as the systemwide default for all columns or hierarchy levels that have the same data type as this column or hierarchy level.

Click **OK** to save these properties for this column or hierarchy level in this analysis only.

The Save as Default button applies slightly differently to the various tabs of this dialog:

- The properties on the Style, Column Format, and Data Format tabs are saved or restored when you select an option with this button.
- The settings on the Conditional Format tab cannot be saved or restored.
- On the Write Back tab, only the **Enable Write Back** property can be saved or restored.
- On the Interaction tab, you can save and restore properties, but the display differs for action links. If you set the interaction mode to action links, then you can create action links and they are displayed in the Action Links area of the tab. If you save the default settings, click **OK** to close the dialog, then re-display the dialog, you will not see the action links in the Action Links area. You can click the Add Action **Link** button to display a list of the saved actions so that you can select one to use.

# **Column Properties dialog: Column Format tab**

Use this tab of the "Column Properties dialog" to modify how folder and column headings are displayed in the analysis and to specify how repeated values display in the column or hierarchy level.

This dialog is also displayed as:

Hierarchical Level Properties dialog: Level Format tab

For more information, see Chapter 7, "Formatting Analyses, Views, and Dashboard Pages".

# Components

#### Hide

Not available for hierarchy levels. Use this box to hide the column in the analysis. You can hide columns whose appearance adds no value to the analysis. Hidden columns do not affect the aggregation of the values. For example, you want to build an analysis that includes only customers located in Illinois. To build the proper filter, you must include the column called Customers. State. Because this column was added for filtering purposes, only, and its appearance adds no value to the analysis, then you can hide this column.

#### Folder Heading and Column Heading

Not available for hierarchy levels. Use these fields to view or modify the name of the folder or column that is provided by the repository in which the column resides. To modify this field, you must first select the **Custom Headings** box, then you can specify a different heading to use. To modify the heading's appearance, click the Edit Format button.

#### **Edit Format**

Use this button to modify the corresponding heading's format. For example, you can modify the heading to be displayed in 14-point bold Helvetica font. Any formatting changes that you specify override the Oracle BI EE style sheet and any formatting preferences that you specified on the "Column Properties dialog: Style tab" for this column.

#### **Custom Headings**

Use this box to enable the **Folder Heading** and **Column Heading** fields for editing. The fields will be read-only until you select this box.

You can reference variables in the Folder Heading and Column Heading fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

#### **Show TimeZone**

This box displays only for the columns and hierarchy levels that have the date/time data type. Use this box to include the Time Zone button with the column or hierarchy level. Click the box multiple times to move through the three different states. When the box is selected, the button is displayed. When the box is not selected, the button is not displayed. When the box appears to be not available, then the default system behavior is used.

The Time Zone button displays with the data column or hierarchy level in a view, and you can click the button to view the name of the display time zone. For more information about modifying the time zone, see "Display Time Zone" in "Column Properties dialog: Data Format tab".

### Value Suppression

Use the buttons in this area to affect the display of repeating data values for the column or hierarchy level.

The data in one column or hierarchy level of a folder might be repeated in relation to rows of data in other columns or hierarchy levels in the folder. For example, if one column lists customer names and another column lists the regions that those customers are in, then the region data could be repeated for each customer row. You can choose to display duplicate data only once, or display it for every row. Displaying repeating or duplicated data only once can make a table somewhat easier to read, and can make distinctions in that data more apparent.

You can select one of the following buttons:

- **Suppress** Displays repeating data only once and suppresses the duplicate rows in the column or hierarchy level.
- **Repeat** Displays repeating data for every row in the column or hierarchy level.
- **Default** Retains the default display characteristics of the column or hierarchy level.

# **Column Properties dialog: Conditional Format tab**

Use this tab of the "Column Properties dialog" to add a condition to a column or hierarchy level. You specify a condition to affect the formatting of values based on certain criteria. The formatting that you specify for a column or hierarchy level on this tab will be visible in any view that can display data and its formatting, except for graphs, funnel graphs, and gauges. For information on conditional formatting in graphs, see "Graph Formatting Based on Columns".

This dialog is also displayed as:

Hierarchical Level Properties dialog: Conditional Format tab

For more information, see "Applying Conditional Formatting to Tables and Pivot Tables".

# Components

#### Add Condition

Use this button to begin the process of creating a conditional format by adding a condition to any type of column or to a hierarchy level.

When you access the "New Condition dialog" from the Conditional Format tab, the dialog shows the options that apply to conditional formats. For example, the Operator list contains the operators that are used in conditional formats, and you can apply presentation variables. For information on presentation variables, see "Using Variables".

When you have created a conditional format, you see it listed at the top of this tab. Use the buttons that are displayed with the conditional format to edit the condition, format the values, or delete the format.

#### Clear All

Use this button to delete from the tab any conditional formats that you have created. This button is available only when at least one format exists.

# **Column Properties dialog: Data Format tab**

Use this tab of the "Column Properties dialog" to override the data's default display characteristics by specifying custom formats. The options that display on this tab depend upon the data type (text, numeric, or date) of the column or hierarchy level. For example, if the data type is numeric, then you can add the thousands separator to the values.

This dialog is also displayed as:

Data Format dialog

Hierarchical Level Properties dialog: Data Format tab

For more information, see "Custom Date and Time Format Strings"

# Components

#### **Override Default Data Format**

This box is displayed for all data types.

Use this box to specify that you want to enter an override format for the column or hierarchy level. Selecting this box enables the remainder of the settings on the tab.

#### **Treat Text As**

This list is displayed for the text data type.

Use this list to specify how you want to display the text for the values. You can select from options such as plain text, HTML, or a link. Based on your choice, the Custom Text Format field displays the applicable HTML string used to display the data.

If you select the Custom Text Format option, then you can type the custom format into the **Custom Text Format** field.

#### **Custom Text Format**

This field is displayed for the text data type.

Use this field to view the HTML string that corresponds to the option that you selected in the **Treat Text As** list. This field is read-only for all options except the **Custom Text** Format option.

When you specify the **Custom Text Format** option, you use this field to write HTML calls that provide formatting. You can also type any valid HTML string, including JavaScript, VBScript, and so on.

The first character must be an at sign character (@). This allows devices that are incapable of displaying the custom format to display the data in the appropriate default format.

For example, the following example HTML code sets the width and height of a column or hierarchy level in tables and pivot tables. In the example, the text html enclosed in brackets ([html]) means to use HTML, and the at sign (@) character represents the dynamic contents of the column or hierarchy level.

```
@[html]<span style="width:200px; height:50px">@</span>
```

If you are unfamiliar with HTML, JavaScript, VBScript, and so on, then consult a third-party reference.

#### **Treat Number As**

This list is displayed for the numeric data type.

Use this list to specify how you want to display the number values. You can select from options such as Currency, Percentage, and Month Name. The option that you select determines the fields that display in the Data Format tab.

### Currency Symbol

This list is displayed if you selected the **Currency** option in the **Treat Number As** list.

Use this list to select the currency symbol that you want to be displayed in the column or hierarchy level. For example, you can select the British Pound or the Polish Zloty.

To use the symbol of a user's preferred currency, select the **User's Preferred Currency** option. (Users specify their preferred currencies in the "My Account dialog".)

### **Negative Format**

This list is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the Treat Number As list.

Use this field to specify how you want negative numbers to be displayed in the column or hierarchy level. For example, you can select negative numbers to be displayed as -123 or (123).

#### **Decimal Places**

This list is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the **Treat Number As** list.

Use this list to specify how many numbers you want to include after the decimal point when displaying the value in a view. For example, you can specify two decimal places. Decimal values are always rounded rather than truncated.

In this list, you can use the **up to** options to indicate the maximum number of decimal places to include. In the database, values for a single column or hierarchy level can be stored with various numbers of decimal places. Some might have 2, 4, or 6 for example. If you specify **up to 4** in this list, then values are displayed with no more than 4 decimal places, but potentially with less if the value has less than 4 decimal places.

#### Use 1000's Separator

This check box is displayed if you selected the **Number**, **Currency**, or **Percentage** option in the Treat Number As list.

Select this check box if you want to include a separator, such as a comma, in numbers that are 1000 or greater.

### **Custom Numeric Format**

This field is displayed if you selected the **Custom** option in the **Treat Number As** list.

Use this field to enter a custom number format. To enter a custom numeric format, you can use the number sign (#) to include significant digits, and the number zero (0) to include as many digits as specified, even if the number does not contain that detail.

For example, specifying ##.# shows 12.34 as 12.3, and specifying ##.000 shows 12.34 as 12.340.

### **Date Format**

This list is displayed for the date and time zone data type.

Use this list to specify how you want the date to display in the column or hierarchy level. For example, 5/8/2003 07:34:57 AM or 05/08/2003 7:34:57. If you select the **Custom** option, then you can create a date format in the **Custom Date Format** field.

#### **Custom Date Format**

This field is displayed for the date and time zone data type. For more information, see "Custom Date and Time Format Strings".

Use this field to enter a date format. This field is displayed if you selected the Custom option from the Date Format list.

### **Display Time Zone**

This list is displayed for the date and time zone data type.

Use this list to select and apply a specific time zone to the column or hierarchy level. Note the following default conditions:

- If you select the **Default** option and the administrator has specified a system default time zone, then the system default time zone will be used to display the time value in the column or hierarchy level.
- If you select the **Default** option and the administrator has not specified a system default time zone, then the user's preferred time zone will be used to display the time value in the column or hierarchy level.
- If you select the **Data time zone** option, then the time values are displayed in the column or hierarchy level exactly as they are stored in the database.
- If you select a specific time zone (for example, GMT +05:45 Kathmandu) and the administrator has specified a system default time zone, then the system's default time zone will be converted into the specific time zone that you selected.

#### **Data Time Zone Offset**

This field is displayed for the date and time zone data type.

Use this field to specify an offset for the time zone that you selected. For example, suppose you selected GMT +05:45 Kathmandu. You can specify an offset of 15 minutes to use when displaying time values for columns or hierarchy levels.

# Column Properties dialog: Interaction tab

Use this tab of the "Column Properties dialog" to specify what you want to happen when the user clicks a column heading or value (for example, the user can click a column value to drill down into the data that was summed to create the column value).

This dialog is also displayed as:

Hierarchical Level Properties dialog: Interaction tab

For more information, see:

- "Interactions in Views"
- "Drilling in Results"
- "What Are Actions?"
- "Adding Actions to Analyses"
- "Editing Actions and Action Links Added to Analyses"

# Components

### Column Heading: Primary Interaction and Value: Primary Interaction

Use this box to specify what happens when you click either the column heading or a value in the column or hierarchy level. The values that are available depend on the type of column and on column heading versus value.

- **Default (type)** Specifies what happens by default when you click the column heading or a value. When you first install Oracle Business Intelligence, the default is dependent on the type of column. You can change the default by selecting another option from this list, then clicking the Save as Default button to save that option as the default for the column.
- **None** Specifies that nothing happens when you click the column heading or a value. This option turns off drilling for attribute columns; it does not turn off drilling for hierarchical columns.
- **Drill** Not available for hierarchical column headings. Specifies that you drill up or down after clicking the column heading or a value for a column.
- Action Links For hierarchical column headings, this option is **Drill + Action Links**. Displays the Action Links area, where you add action links that apply when you click the column heading or a value.
- **Send Master-Detail Events** Available only for attribute column values and is shown as Drill + Send Master-Detail Events for hierarchical column values. Use this option to specify that data views in this analysis are to act as master views in master-detail relationships and send master-detail events. This option also displays the Specify channel field, which you must complete if you select this option.

For more information on master-detail relationships, see "What is Master-Detail Linking of Views?"

### Specify channel

This field is displayed only if you select **Send Master-Detail Events** in the **Primary Interaction** field for a value.

Use this field to enter one or more channels on which data views are to send master-detail events. Note that the name of the channel is case sensitive.

#### **Action Links**

The Action Links area is displayed if you select **Action Link** from the **Column** Heading: Primary Interaction box or Value: Primary Interaction box.

Displays the action links that have been added to a column heading or value, including the text of the action links, the actions associated with the links, and whether the action links are always enabled or enabled conditionally.

Use this area to view and manage action links:

- To add a new action link, click the **Add Action Link** button to display the following options:
  - *Action* (where *Action* is the name of an action that has been saved as a default) — Use this option to add the action to the analysis. For more information on saving defaults, see the "Column Properties dialog".
  - New Action Link Use this option to display the "New Action Link dialog", where you create a new action link.
- To edit an action link, select the link in the list and click the Edit Action Link button to display the "Edit Action Link dialog".
- To delete an action link, select the link in the list and click the **Delete Action Link** button.
- To specify that, when only one action link is available at runtime, the action link is to be executed immediately rather than be displayed in a menu for selection, select the Do not display in a popup if only one action link is available at runtime box.

# Column Properties dialog: Style tab

Use this dialog to specify properties for displaying values in various locations such as in a column or hierarchy level of data, in a view such as a table, and in a column or section that you are adding to a dashboard page.

In this dialog, a setting of Default (System) indicates that a user has not yet overridden the default values that were provided during installation. Each property has only one default setting at a time.

For table and pivot table views, the formatting that you specify in this dialog applies to the look of a table. The formatting is displayed slightly differently in a pivot table. For example, the default colors differ for tables and pivot tables.

For more information, see:

- Chapter 7, "Formatting Analyses, Views, and Dashboard Pages"
- "Adding Content to Dashboards"
- "Changing the Properties of Objects Added to Dashboard Pages"

This dialog is also displayed as:

Column Properties dialog Edit Column Format dialog Edit Font Format dialog **Edit Format dialog** Format Caption dialog Format Container dialog Format Legend View dialog Format Logo dialog Format Narrative View dialog Format Static Text View dialog Format Subtitle dialog Format Text dialog

Format Time dialog Format Title dialog Format Title View dialog Hierarchy Level Properties dialog: Style tab Section Heading Properties dialog Section Properties dialog

# Components

**Note:** Not all components are available in each version of this dialog.

The toolbar displays only in those instances in which you can copy and paste cell formatting properties from one location to another. The toolbar contains the following buttons:

Clear Cell Format (restore defaults) — Use this button to remove the specifications that you have made and to return the settings to the values that they had when defaults were last saved.

The Clear Cell Format (restore defaults) and the Copy Cell Format buttons affect the settings in the following ways:

- If the dialog has no tabs, then the button affects all the settings in the dialog.
- If the dialog has multiple tabs, then the button affects only those settings in the tab in which the button is displayed.
- **Copy Cell Format** Use this button to copy the formatting specifications from the dialog, so that you can apply them elsewhere.
- Paste Cell Format Use this button to paste the formatting that you have copied into the appropriate location.

#### Caption

This box applies to totals that you include with tables and pivot tables. Use this box to specify custom text to insert into a total heading. Enter the text as follows

@ — Displays the value of the data

For example, if a total is specified for the Region column, and you enter the following text into the Caption field for the total heading:

- All values in the @

The total heading would display the following text for the Western Region:

- All values in the Western Region
- "@" Displays the @ symbol
- "\"" Displays the double quote
- "\\" Displays the \ symbol
- \ Displays the \ symbol

The double quote syntax is not limited to a single character. In general you can use a backslash escaped string inside double quotes. For example:

```
"1234567890\\abc\\d\"x\"yz!@#$%^&*()-+=_{}[];:'|?/><,.`~"
```

Is displayed as:

```
1234567890\abc\d"x"yz!@#$%^&*()-+=_{}[];:'|?/><,.`~
```

For more information, see "Adding Totals to Tables and Pivot Tables".

Use this box to select the font family.

#### Size

Use this field to enter the font size.

#### Color

Use this box to select the font color.

#### Style

Use this box to select the font style, such as bold or italic.

#### **Effects**

Use this box to select the font effects, such as underline or strike through.

### **Horizontal Alignment**

Use this box to select the type of horizontal alignment, such as left, right, or center.

#### **Background Color**

Use this box to select the color of the background.

#### **Vertical Alignment**

Use this box to select the type of vertical alignment, such as top, bottom, or center. Vertical alignment does not have any impact unless the column spans multiple rows of other columns.

#### **Image**

Use this field to specify the image that you want to display inside of the cell. When you click the field, the Graphics dialog is displayed. For more information, see "Graphics dialog".

#### **Border Position**

Use this box to select the position of the border of the cell, column, or section, such as none or all. You can select or deselect custom borders by clicking the top, bottom, left, and right borders near the Position list.

### **Border Style**

Use this box to select the style of the border, such as single, double, or thick.

#### **Border Color**

Use this box to select the color of the border.

#### Width

Use this field to specify the width of the cell, column, or section on the page.

Use this field to specify the height.

#### Indent (Left Padding)

Use this field to specify the indent (that is, the left padding).

#### Right Padding

Use this field to specify the indent (that is, the right padding).

#### Top Padding

Use this field to specify the indent (that is, the top padding).

#### **Bottom Padding**

Use this field to specify the indent (that is, the bottom padding).

#### **Use Custom CSS Style**

Use this box to select a custom cascading style sheet style to use for formatting.

### **Use Custom CSS Class**

Use this box to select a custom cascading style sheet class to use for formatting.

# Column Properties dialog: Write Back tab

Use this tab of the "Column Properties dialog" to set the properties of a column that affect writing back values to the data source to expose the write-back capability in tables. If you want to use write back, then you must also use the Table Properties dialog: Write Back tab. Write back is not available for hierarchical columns.

For more information, see "Modifying Values and Performing Write Back".

This dialog is also displayed as:

Write Back Settings dialog

# Components

#### **Enable Write Back**

Use this box to allow users to modify values in the column, if the following are true:

- If the column has been enabled for write back in the repository.
- If the column has a data type of measure, text, or date and time.

Use care when allowing users to enter decimal values. Presentation Services simply sends the value that the user types to the Oracle BI Server, which must be configured to handle users by locale. For example, the Oracle BI Server must be aware of the locale for each user, so that it can properly handle a decimal value that includes either a period or comma as a decimal separator.

If the column has not been enabled for write back in the repository, then the Enable Write Back box is disabled.

When you select this box, additional options for write-back are displayed.

#### **Text Field Width**

Use this box to select the width for the text field where users enter values, for text columns. Use the box to scroll among the values.

This box is not available on the Write Back Settings dialog.

# Compound Layout

Use this area to assemble different views for display on a dashboard. The views are displayed in separate containers within a compound layout. Each container has a toolbar.

Use this area also to view multiple compound layouts, each on its own tab. For more information, see "Creating Additional Compound Layouts".

# Components

#### **Views**

Displays the views assembled for display on a dashboard, according the selected compound layout.

When you run a new analysis, the default assemblage of views can include a title view and either a table or pivot table view. The administrator might have configured a different default assemblage for your company.

#### **Toolbar**

The toolbar for each view contains the following buttons:

- **Format Container** Use this button to display the "Format Container dialog", where you format the container in a compound layout for the view. For example, you can place a green background behind the view in the compound layout. To format the view itself, click the **Edit View** button.
- **Edit View** Use this button to display the editor for the view.
- **Remove View from Compound Layout** Use this button to remove the view from a compound layout. The view remains as part of the analysis.

# **Contact Owner dialog**

Use this dialog to send a message to the business owner of a Scorecard object, such as an initiative or objective.

For more information, see:

"Contacting Business Owners"

# Components

#### **Owner**

Displays the name of the person who is responsible for managing and improving the business value and performance of the scorecard object.

### Subject

Use this box to enter the subject of your message.

### **Priority**

Displays the options High, Normal, and Low to identify the importance and urgency of your message.

### Message

Use this box to enter the text of your message.

# **Content pane**

This pane to the right of the "Catalog page" displays the contents of folders and objects that you select in the "Folders pane" or the results of a search. Use this pane to perform tasks such as:

- Expand the content of folders
- Perform basic tasks on selected objects such as copy and rename
- Perform object-specific tasks (create agents for KPIs, and run prompts for example) using the **More** link below objects.

For information, see "Managing Objects in the Oracle BI Presentation Catalog".

# **Create Delivery Profile dialog**

Use this dialog to create a delivery profile.

You can create any number of delivery profiles. However, only one profile can be active at any given time.

For more information, see:

- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"

This dialog is also displayed as:

Edit Delivery Profile dialog

# Components

#### Name

Use this field to enter the name of the delivery profile. For example, for your office phone, you might use Phone - Office.

#### **Device Priorities**

Use this area to indicate, for each of your delivery devices, what priority content is to be delivered to the device. To do so, next to each delivery device that you want to use when this profile is the active profile, select one or more of the priority content options — High, Normal, or Low.

For example, if you have a pager as one of your delivery devices, you might associate it with high priority content only. When you know that you will be away from your office frequently, and out of e-mail range, you might associate your e-mail device with low priority content.

**Note:** Do not set the priority for devices that you do not want to use. Devices that do not have a priority selected are not used by the profile.

# **Create Device dialog**

Use this dialog to create a delivery device.

For more information, see:

- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"

This dialog is also displayed as:

Edit Device dialog

# Components

#### Name

Use this field to enter the name of the device.

### Category

Use this box to select the device category. For example, if you are adding an e-mail device, select Email. The value in this box affects the values that are available in the **Device Type** box.

#### **Device Type**

Use this box to select the type of device. For example, if you are adding an e-mail device, select either HTML Email for Plaintext Email.

The list of device types is specified on the "Administration: Manage Device Types page".

### Address/Number

Use this field to enter the address for the device. For example, for an e-mail device, enter the e-mail address or for a phone, enter the phone number.

**Note:** When typing a phone number for a device, do not use punctuation such as spaces, dashes, or parentheses.

# **Create New Action dialog**

Use this dialog to create a new action.

For more information, see Chapter 10, "Working with Actions."

This dialog is also displayed as:

Add New Action dialog New Action dialog Edit Action dialog

## Components

#### **Browse**

This button is not available only for all action types.

Displays one of the following dialogs:

- For a Navigate to BI Content action, the "Select BI Content For Action dialog", where you select the Oracle BI EE content to which to navigate
- For a Navigate to EPM Content action, the "Select the Hyperion resource you want this action to invoke dialog", where you select the EPM content to which to navigate
- For an Invoke a Web Service action, the "Select Web Service Operation dialog", where you select a Web Service operation to be invoked
- For an Invoke a Java Method action, the "Select Java Method dialog", where you select the Java method to be invoked
- For an Invoke a Browser Script action, the "Select Script Function dialog", where you select the function to be invoked

**Note:** Before a JavsScript function can be used in an action, your administrator must first include it in the JavasSript file that contains user-defined scripts.

For an Invoke Agent action, the "Select Existing Agent dialog", where you select the agent to be invoked

**Note:** In order for Hyperion resources, Web Service operations, EJBs, and functions to be exposed in their respective dialogs, some setup is required beforehand. For how to expose Hyperion resources, Web Service operations, EJBs, and functions in their respective dialogs, see Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition.

#### **URL**

This field is available only for Navigate to a Web Page and Invoke an HTTP Request actions and only if URL aliases have been defined for these actions.

Use this field to enter the URL of the Web page.

**Tip:** Copy the URL from the browser and paste it in this field.

If URL aliases have been defined for Navigate to a Web Page and Invoke an HTTP Request, and you want to specify an alias for the URL, click the Show URL location aliases button (that is, the down arrow) and select the alias.

For more information on defining URL aliases, see Oracle Fusion Middleware Integrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

#### Request

Use this box to select one of the following options:

**GET** — Use this option to retrieve information from the URL. Any parameters added to the action are appended to the URL using the following syntax:

```
&paramName1+paramValue1&paramName2=paramValue2 (and so on)
```

**POST** — Use this option to post information to the URL. Any parameters added to the action are posted to the URL as name value pairs.

This field is available only for Invoke an HTTP Request actions.

#### **Define Parameters**

This button is available only for Navigate to a Web Page and Invoke an HTTP Request actions

Use this button to display the **Define Parameters** area. It also automatically parses the specified URL for parameters and lists them in the **Define Parameters** area.

For example, this URL:

```
http://finance.google.com/finance?g=ORCL
```

#### Becomes this:

```
http://finance.google.com/finance?q=@{1}
```

And an action parameter with the name 1 and a default value of ORCL is displayed in the **Define Parameters** area.

Any part of a URL can be converted into a token as long as the token name matches the parameter name. When an action is executed, the value of the parameter is used in the final URL.

## Language

This box is available only for Invoke Server Script actions.

Use this box to select the script type — either **JavaScript** or **VB Script**.

#### Script Path

This field is available only for Invoke Server Script actions.

Use this field to enter the path of the script to be executed. Use a path name relative to the value of the DefaultScriptPath element in the instanceconfig.xml file for Scheduler. (For more information on the DefaultScriptPath element, see Oracle Fusion Middleware *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.*)

#### **Function Name**

This field is available only for Invoke a Browser Script actions.

Use this field to enter the name of the JavaScript function to be executed. Click **Browse** to display the "Select Script Function dialog", where you can select a script.

#### Path

This field is available only for Invoke Agent actions.

Displays the path to the agent that is to be invoked.

## **Execute for Recipients**

This box is available only for Invoke Agent actions.

Use this box to select one of the following options to specify the scope of the recipients:

- of specified Agent Specifies the recipients of the agent to be invoked (that is, the agent specified in the **Path** box).
- of current Agent Specifies the recipients of the current agent (that is, the agent to which the action is being added).
- of both specified and current Agent Specifies the recipients of both the agent to be invoked and the current agent.
- **common to specified and current Agent** Specifies the recipients that are common to both the agent to be invoked and the current agent.
- of specified Agent, and not current Agent Specifies the recipients of the agent to be invoked but with the recipients of the current agent excluded.

### **Define Parameters**

Use this area to define the action parameters.

Depending on the action type, some action parameters might be displayed automatically in this area. For example:

- For an Invoke a Web Service action, the parameters are read and displayed from the Web Service Definition Language file.
- For an Invoke a Browser Script action, the parameters are read and displayed from the script file, if they have been declared and published in the file.
- For a Navigate to E-Business Suite action, these parameters are displayed:
  - **FunctionCode** The name of the function that relates to the target E-Business Suite form, for example, GLXIQJRN.
  - **ConnectionPool** The name of the connection pool for the Oracle E-Business Suite database in the Oracle BI repository, for example, EBS12.

You can also define optional parameters for passing the context from Oracle Business Intelligence to EBS forms.

This area includes the following columns:

- **Name** Use this column to view, edit, or enter the name of the parameter.
  - For Navigate to a Web Page and Invoke an HTTP Request actions, to embed a parameter value anywhere within the URL, enter the token @{Name} where 'Name' is the value specified in the Name column below. There is no limit to the number of parameters that can be embedded.
- **Prompt** Use this column to enter the prompt to be displayed to users, if the user is to provide the parameter value.

- **Value** Use this column to enter the parameter value. Click the **Change type of** value button to select one of the following types of values and then specify the value:
  - **Value** Select this option to specify a value and then enter the value in the
  - **Session Variable** Select this option to use the value of a session variable, and then enter the name of the session variable in the field, or click the Show **popular Session variables** button (to the right of this field) and select a session variable from a list of commonly-used variables.
  - **Repository Variable** Select this option to use the value of a repository variable and then enter the name of the repository value in the field.
  - Request Column Select this option to display the "Choose Request Column dialog", where you select the column in an analysis whose value is to be used as the value of an action parameter.
    - This option is available only when you are adding an inline action to an agent that will be conditionally executed based on an analysis.
  - **Column Value** Select this option to use a column value in your analysis criteria and then click the Column Value button and select the column.

For example, suppose you have the Region and District columns in your analysis criteria and define an action link on the District column that maps a parameter to the Region column. When you execute that action link (by clicking on a district), the region value for that district is used. Note that in a pivot table, the mapped values depend on the current layout or state of the table.

This option is available only when you are adding an inline action to an analysis.

For more information on session and repository variables, see "Using Variables".

- **Fixed** Use this column to specify whether to allow users to see but not set the parameter. Select the box to allow users to see but not set the parameter. Deselect this box to allow users to see and set the value.
- **Hidden** Use this column to specify whether to hide the parameter from users. Select the box to hide the parameter from users. Deselect this box to show the parameter to users.
- **Optional** Use this column to specify whether the parameter requires a value before the action can be executed. Select this box to make the value optional. Deselect this box to make the value required.
- **Add Parameter** Use this button to add a parameter. (Whether you can add a parameter for an action, depends on the action type.)
- **Delete Parameter** Use this button to delete a parameter.

#### **Filters**

This area is available only for an action that invokes an agent that is conditional based on an analysis that filters its data by a column prompt.

Use this area to map any column of the specified agent (that is, the agent to be invoked) that contains a column prompt to any to column of the current agent (that is, the agent to which the action is being added). At runtime, the system generates a filter based on the data returned by the execution of the conditional analysis of the current agent.

For more on how filters work in an Invoke Agent action, see Oracle Fusion Middleware *Integrator's Guide for Oracle Business Intelligence Enterprise Edition.* 

## **Options**

This button is available only for actions where it is appropriate to display information to users. For example, this option is not available for actions added to agents.

Use this button to display the "Action Options dialog", where you specify information to display to users when they run an action.

#### Save As

This button is available only on the Edit Action dialog for named actions.

Use this button to display the dialog, where you save the action to the catalog as a new action with another name.

### **Notes**

For more information about creating and deploying Web Service operations, EJBs, or scripts to be used in actions, see Oracle Fusion Middleware Integrator's Guide for Oracle Business Intelligence Enterprise Edition.

# **Create New Agent dialog**

Use this dialog to create a new agent from a KPI.

For more information, see:

- "Creating an Agent From a KPI"
- Chapter 8, "Delivering Content"

## Components

#### Name

Use this field to enter a name for the agent.

## **Description**

Use this field to enter a description of the agent.

### Location

Use this field to select a folder or create a new folder in which to save the agent. To create a new folder, click the New Folder option in the list to display the "Create New Folder dialog". To select a folder that is not listed, click the Folder button to display the "Select Agent Location dialog".

## Trigger Agent if KPI Status is

Use this box to select the KPI status that is to initiate the agent to deliver its content and execute its actions.

### Qualify

Displays the dimensions that must be pinned. Select a value for each dimension.

# **Create New Device Type dialog**

Use this dialog to create a delivery device type. This dialog is displayed from the "Administration: Manage Device Types page".

For more information, see Oracle Fusion Middleware System Administrator's Guide for *Oracle Business Intelligence Enterprise Edition.* 

This dialog is also displayed as:

Edit Device Type dialog

## Components

### Name

Enter the name of the device type.

## Category

Use this box to select the category of the device type. Select from Mobile Phone, Pager, or Handheld Device.

#### **Domain**

Enter the domain or e-mail extension of the service provider, such as pagenet.net.

# **Custom Permissions dialog**

Use this dialog to assign a specific permission or build a specific set of permissions for a catalog object. For information about assigning detailed privileges that further refine the tasks users can perform, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For more information, see:

- "What Are Permissions?"
- "Assigning Permissions"

## Components

#### Read

Use this option to enable users to view, but not modify, the object.

#### **Execute**

Use this option to enable users to run or launch the programs or applications associated with the object, such as an agent or the actions for an action link.

#### **Traverse**

Use this option to give the user authority to bypass any permissions set on the folder that would prevent the user from accessing the object. Note that this option does not change the folder's permissions. For example, if you grant users Traverse Folder permission to the /Shared Folders/Test folder, they cannot access objects in the/Shared Folders/Test folder but can access objects stored in lower-level folders, such as the /Shared Folders/Test/Guest folder.

## Write

Use this option to enable users to modify the object.

### **Delete**

Use this option to enable users to delete the object.

## Change Permissions

Use this option to enable users to modify or assign other permissions to the object.

## Set Ownership

Use this option to enable users to specify the owner of the object.

## Run Publisher Report

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to run the report. When the user runs the report, the report will be compiled using the most current data.

#### Schedule Publisher Report

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to schedule the report.

## **View Publisher Output**

This option displays for all object types; however, you can only apply it to Oracle BI Publisher objects. Use this option to allow the user to view, but not run or modify, the report.

# **Custom View Properties dialog**

Use this dialog to specify a background image for the diagram in a custom view.

For more information, see:

- "Custom View tab: Diagram tab"
- "What Are Custom Views?"
- "Creating Custom Views"

## Components

## **Background Image**

Use this field to enter the location of the image.

## Size to Fit

Use this check box to specify whether to resize the image to fit the diagram.

## **Maintain Aspect Ratio**

Use this check box to specify whether to maintain the aspect ratio of the image.

## **Custom View tab: Details tab**

Use this tab of the "Scorecard editor: Custom View tab" to specify supporting information for a custom view.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

## Components

#### Name

Displays the name of the custom view.

## **Description**

Use this field to enter a description of the custom view.

#### **Business Owner**

Displays the userID of the person responsible for managing the custom view. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

## **Objectives and KPIs**

Use this table to view and manage the objectives and KPIs that are displayed in the custom view.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

## **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the custom view.

## **Custom View tab: Diagram tab**

Use this tab of the "Scorecard editor: Custom View tab" to create a diagram that shows a customized view of your business and strategy data.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

## Components

#### Diagram area

Use this area to drag and drop objectives and KPIs that you want to show in your customized view.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

To display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu".

To display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

To zoom in and zoom out of the diagram or to specify a background image for the diagram, use the toolbar buttons on the "Scorecard editor: Custom View tab".

To work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".

To work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".

# **Customize Condition dialog**

Use this dialog to customize a condition that is based on an analysis that includes one or more prompted filters. (A prompted filter is a filter whose operator is set to Is Prompted.)

For more information, see "Agent editor: Condition tab".

This dialog is also displayed as:

Customize Delivery Content dialog

## Components

## **Edit the Prompted Filters**

Displays the prompted filters associated with the analysis.

Click the Edit button adjacent to a prompted filter to display the "Edit Parameter Filter dialog", where you edit the filter.

# **Customize Gauge Limit dialog**

Use this box to customize the minimum or maximum gauge limit.

For more information, see "Gauge Properties dialog: Scale tab".

## Components

## **Gauge Limit**

Use this box to specify the custom gauge limit by selecting one of the following options:

- Static Value Select this option to specify a static value, such as 1000. You can specify either an actual value or a percentage. The value you specify depends on the range of data points. For example, the maximum gauge limit should be more than the maximum data point so that all data points are shown on the gauge.
- **Variable Expression** Select this option to specify a string. When you select this option, the **Default Value** field is displayed in which you enter the string.
  - You can reference one or more variables in the string (or expression). For example, you might reference a presentation variable named MaxSales. For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables".
- **Column** Select this option to specify a measure column and then select the name of the column, for example, Dollars.

**Note:** Only columns that are in the metadata repository or that are based on repository columns (such as Dollars\*0.10) are displayed as selections.

**SQL Statement** — Select this option to specify a SQL statement and enter the SQL statement, for example:

"Sales Measure"."Year Ago Dollars"\*10

# **Customize Scale Marker dialog**

Use this dialog to set the value for one of the following items for a graph:

- Position of a line scale marker
- Low value of a range scale marker
- High value of a range scale marker

To set the value, you can use a static value, a presentation variable, a measure column, or a SQL query. If a value is not valid, then the scale marker is ignored.

For more information, see "Scale Markers dialog".

## Components

#### Static Value

Use this option to set the value to a hard coded value that you specify. If you select this option, then enter the hard coded value in the field to the right of the option.

## Variable Expr

Use this option to set the value to the value of a presentation variable. If you select this option, then enter the presentation variable in the field to the right of the option and a default value in the (default) field.

#### Column Name

Use this option to set the value based on a measure column. If you select this option, then select the measure column in the box to the right of the option.

Note that using a measure column could yield numerous values. Only the first value is applied.

## **SQL Query**

Use this option set the value based on the results of a SQL query. If you select this option, then enter the SQL query in the box beneath the option.

Note that the results could be a table but only the first row and first column cell value is applied.

# Customize Subscription to Agent dialog

Use this dialog to customize an agent subscription.

For more information, see "Customizing Your Agent Subscriptions".

## Components

### Condition

Use "Customize Subscription to Agent dialog: Condition Parameters tab" to customize prompted filters for an analysis that is used in an agent condition.

### Content

Use "Customize Subscription to Agent dialog: Content Parameters tab" to customize prompted filters for an analysis that is the delivery content for an agent.

# Customize Subscription to Agent dialog: Condition Parameters tab

Use this tab of the "Customize Subscription to Agent dialog" to customize prompted filters for an analysis that is used in an agent condition.

For more information, see "Customizing Your Agent Subscriptions".

## Components

## **Edit the prompted filters**

Displays the prompted filters that you can customize.

## Modify operator/value for this parameter

Use this button to displays the "Edit Parameter Filter dialog", where you can customize the prompted filters.

# Customize Subscription to Agent dialog: Content Parameters tab

Use this tab of the "Customize Subscription to Agent dialog" to customize prompted filters for an analysis that is the delivery content for an agent.

For more information, see "Customizing Your Agent Subscriptions".

## Components

## **Edit the prompted filters**

Displays the prompted filters that you can customize.

## Modify operator/value for this parameter

Use this button to displays the "Edit Parameter Filter dialog", where you can customize the prompted filters.

## Dashboard builder

Use this Dashboard builder to build or edit dashboards. The process of building or editing a dashboard includes:

- Adding and changing pages, objects, and other content on the dashboard
- Changing the properties of the dashboard

For more information, see:

- "Creating Dashboards"
- "Editing Dashboards"
- "Changing the Properties of a Dashboard and its Pages"
- "Changing the Properties of Objects Added to Dashboard Pages"

## Components

## **Page Tabs**

Use the tabs across the top of the editor to select the dashboard page that you want to edit.

## **Dashboard Objects**

Use the "Dashboard Objects pane" to select the objects that you want to include on a dashboard page and drag and drop them to the Page Layout area.

## Catalog

Use the "Catalog pane" to select objects from the Oracle BI Presentation Catalog that you want to include on a dashboard page and drag and drop them to the Page Layout area. This adds a shortcut to the content as saved in the catalog. If the content changes, then the change will be reflected on the dashboard page.

To locate the content, you can browse by either the catalog folder it is stored in, or by the dashboard on which it is located.

#### Page Layout

Use "Page Layout area" to layout and place the content (that is, objects from the Dashboard Objects pane and the Catalog pane) that you want to include on a dashboard.

### **Toolbar**

The toolbar contains the following buttons:

- Add Dashboard Page Use this button to display the "Add Dashboard Page dialog", where you create a new page in this dashboard. The page is displayed in a new tab in the Dashboard builder.
- **Delete Current Page** Use this button to delete the current dashboard page.
- **Tools** Use this button to display a menu with the following options.
  - Dashboard Properties Use this option to display the "Dashboard Properties dialog", where you specify properties of the dashboard and of dashboard pages.

- **Print and PDF Properties** Use this option to display the "Print Options dialog", where you specify page settings and header and footer content for the PDF output.
- Page Report Links Use this option to display the "Report Links dialog", where you specify the links to apply to all analyses in the dashboard page, unless customized settings have been specified for particular analyses.
- **Allow Saving Personal Customizations** Use this option to specify whether users can save personal customizations. For more information on allowing the saving of personal customizations, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.
- Publish Page to Dashboard Use this option to display the "Publish Page to Dashboard dialog", where you specify the dashboard to which you want to publish the current dashboard page. See "Publishing Dashboard Pages".
- **Preview** Use this button to view how a dashboard page will look to an end user. This is helpful if you want to see what the page will look like before you save the content.
- Run Use this button to exit the Dashboard builder and return to the dashboard in runtime.
- **Save** Use this button to save your changes to the dashboard.
- **Save Dashboard As** Use this button to save the dashboard by another name.

## Page Layout area

Use this area to layout and add the content that you want on a dashboard by dragging and dropping objects from the "Dashboard Objects pane" and "Catalog pane". After you drop an object to this area, you can modify the object using the buttons on its Toolbar.

This area is part of the "Dashboard builder".

## Components

## **Object Representations**

Each object that you drag and drop to the Page Layout area is represented by a rectangle.

## **Object Toolbars**

Each object dropped to the Page Layout area contains a toolbar that displays when you hover over the object. The Object Toolbar contains the following buttons:

- **Properties** Use this button to select from various options for modifying the object. What this button displays depends on the type of object. For some objects a properties dialog is displayed. For other objects, a menu of options is displayed. See "Properties Buttons for Objects".
- **Delete** Use this button to delete the object from the dashboard page.
- **Vertical Layout** This button is available for sections only. Use this button to arrange the objects in the section so that they are stacked one on top of another.
- Horizontal Layout This button is available for sections only. Use this button to arrange the objects in the section so that they are positioned side-by-side.

## **Properties Buttons for Objects**

Each object that is represented on the "Page Layout area" has a toolbar that contains a **Properties** button. What the button displays depends on the type of object. The following sections describe, for each type of object, what the **Properties** button displays.

## **Column Properties**

This button displays the following options:

- **Break** This option is available only if the page has more than one column and only for columns after the first column. Use this option to display the "Break dialog", where you add page and column breaks to the page layout.
- Column Properties Use this option to display the "Column Properties dialog", where you specify the properties for the column, such as cell alignment, border color and so on.

## **Section Properties**

This button displays the following options:

- **Condition** Use this option to display the "Section Condition dialog", where you specify the condition to be used to determine whether the section is to be displayed. See "Using Conditions to Determine Whether Sections Are Displayed in Dashboard Pages".
- **Permissions** Use this option to display the "Section Permissions dialog", where you specify which accounts are granted or denied access to the section.
- Format Section Use this option to display the "Section Properties dialog", where you specify the properties for the section, such as cell alignment, border color and so on.
- **Rename** Use this option to display the "Rename dialog", where you rename the
- **Drill in Place** Use this option to specify how the results are displayed when a user drills in an analysis.

To:

- Show the new results directly in the dashboard, replacing the original analysis, click this option until a check mark is displayed next to the option. This is the default behavior. The area occupied by the original analysis resizes automatically to hold the new results.
- Replace the entire dashboard with the new results, click this option until the check mark is removed.

This option applies to all drillable analyses within the section. The user can click the browser's **Back** button to return to the original analysis or the dashboard.

Use this option for prompts that are created for hierarchical columns.

For more information, see "Drilling in Views".

**Collapsible** — Use this option to specify whether the user can expand and collapse this section on a dashboard page or whether the section is always expanded.

- **Show Section Header** Use this option to specify whether to display the header for the section, which initially includes the title of the section. You can hide the title using the **Show Section Title** option.
- **Show Section Title** Use this option to specify whether to display the title of the

To format the title, use the **Rename** option to display the "Rename dialog".

## **Alert Section Properties**

This button displays the following options:

- **Section Condition** Use this option to display the "Section Condition dialog", where you specify the condition to be used to determine whether the alert section is to be displayed.
- Permissions Use this option to display the "Section Permissions dialog", where you specify which accounts are granted or denied access to the section.
- Format Section Use this option to display the "Section Properties dialog", where you specify the properties for the alert section, such as cell alignment, border color and so on.

## **Action Link Properties**

Use this button to display the "Action Link Properties dialog", where you set the properties of an action link.

## **Action Link Menu Properties**

Use this button to display the "Action Link Menu Properties dialog", where you set the properties of an action links menu.

## Link or Image Properties

Use this button to display the "Link or Image Properties dialog", where you specify properties for a text link or image link that you are adding to a dashboard page.

#### **Embedded Content Properties**

Use this button to display the "Embedded Content Properties dialog", where you specify the URL and other information about content that you want to embed on a dashboard page.

#### **Text Properties**

Use this button to display the "Text Properties dialog", where you specify properties for a text object, including the text and formatting tags.

#### **Folder Properties**

Use this button to display the "Folder Properties dialog", where you add a view of a Catalog folder and its contents.

#### **BI Publisher Report Properties**

Use this button to display the "BI Publisher Report Properties dialog", where you specify the information for adding an Oracle BI Publisher report.

#### **Analysis Properties**

This button displays the following options:

- **Display Results** Displays the following options to specify how to display the results of the analysis:
  - **Embedded in Section** Use this option to execute the analysis automatically and display the results directly in the dashboard page
  - Link Within the Dashboard Use this option display a link that users must click to execute the request and see the results within the dashboard
  - **Link In a Separate Window** Use this option display a link that users must click to execute the reguest and see the results in a new window
- **Report Links** Use this option to display the "Report Links dialog", where you select which links are displayed with the analysis on the dashboard page.
- **Show View** Use this option to specify how to display the analysis, either as a default compound view or as one of the available views. (Note that the icon representing the object changes to indicate the type of view.) For more information on views, see. "Adding Views for Display in Dashboards".
- **Rename** Use this option to display "Rename dialog", where you rename the analysis.
- Edit Analysis Use this option to edit the analysis in the "Analysis editor".

## **Prompt Properties**

This button displays the following options:

- **Edit** Displays the "Prompt editor", where you create prompts.
- **Scope** Displays the following options to specify scope of the prompt:
  - **Dashboard** Use this option to specify that the prompt applies to the entire dashboard.
  - **Page** Use this option to specify that the prompt applies to the dashboard page.

## **Scorecard Object Properties**

This button displays the following options:

- Edit Pinnings Displays the "Dimension Pinnings dialog", where you pin (or set) the value of one or more KPI dimensions.
- **Edit View** Displays the scorecard object in the "Scorecard editor".
- Format View Displays the "Scorecard Content Properties dialog", where you specify how the scorecard object is to be formatted.

# **Dashboard Objects pane**

Use this pane to select the dashboard objects that you want to include on a dashboard page and drag and drop them to the "Page Layout area".

For more information, see "Adding Content to Dashboards".

This pane is part of the "Dashboard builder".

## Components

## **List of Objects**

Use the list of dashboard objects to decide what to include on a dashboard page. Drag and drop an object from the list to an appropriate location in the page layout area on the right side of the Dashboard builder.

For more information on dragging and dropping, see "Dragging and Dropping Objects to the Page Layout Area in the Dashboard Builder".

Table B-2 lists and describes the dashboard objects that you can include on a dashboard page.

Table B-2 List of Dashboard Objects

| Dashboard Object | Description   |
|------------------|---|
| Column           | Used to align content on a dashboard. (Sections within columns hold the actual content.) You can create as many columns on a dashboard page as you need. Note that the columns used in the Dashboard builder are not related to the columns used in the Analysis editor.  |
| Section          | Used within columns to hold the content, such as action links, analyses, and so on. You can drag and drop as many sections as you need to a column.   |
| Alert Section    | Used to add a section in which to display Alerts from agents, if any.   |
|                  | On users' My Dashboard, an Alert section is added automatically to the first page, if you do not manually place one there. You cannot disable the appearance of an Alert section on the first page of users' My Dashboard. You can add an Alert section to an additional dashboard page so that section will then be displayed on both dashboard pages. |
| Action Link      | Used to add an action link. An action link is a link that you embed in an analysis, dashboard page, or KPI that, when clicked, runs an associated action.   |
|                  | For more information, see Chapter 10, "Working with Actions."   |
| Action Link Menu | Used to add an action link menu. An action link menu let users choose, from a list of action links, the right action to be executed.  |
|                  | For more information, see Chapter 10, "Working with Actions."   |
|                  | <b>Tip:</b> If you add an action link to an action link menu and later decide that you do not want the link to be displayed in the menu, you can simply drag and drop it elsewhere on the page.   |
| Link or Image    | Used to add text links and image links and specify what should happen when a user clicks them. For example, you can direct users to another Web site or dashboard, open documents, launch applications, or perform any other action that the browser supports. You can also add an image or text only, without any links.                               |

Table B-2 (Cont.) List of Dashboard Objects

#### **Dashboard Object**

#### Description

#### **Embedded Content**

Used to add embedded content. Embedded content is any content that is displayed within a window (called a frame) inside the dashboard, as opposed to content that is accessed by clicking a link. Content that you might want to embed includes analyses, Excel charts, documents, Web sites, tickers from Web sites, and so on. When you embed content into a dashboard, the required HTML is automatically added to the target content.

Analyses are embedded by default. Embedding an analysis in a dashboard causes it to execute automatically and to display the results within the dashboard. This provides access to current results.

**Note:** Some third-party Web sites, because of the way they have been created, cannot be embedded within another Web page. If you see unexpected results when viewing an embedded Web site, then you might need to click the browser's Back button until an Oracle Business Intelligence screen reappears, or close and then reopen the browser. Then, remove the embedded Web site from the dashboard.

Used to add plain text or, if allowed at your organization, HTML.

See the administrator to find out if adding HTML is allowed at your organization.

If you want to add embedded content, which is content that is displayed in a window within the browser, then use the Embedded Content object instead. Then, using the Embedded Content feature, specify the name and location of the target, and the required HTML is wrapped around the target for you.

Used to add a view of a Catalog folder and its contents. For example, you might add a folder that contains a collection of saved analyses that you run frequently. Then from the dashboard, you can open the folder, navigate to a saved request, and click it to run it.

Text

Folder

# **Dashboard Filters and Variables dialog**

Use this dialog to add hidden named prompts to a dashboard or a dashboard page.

For more information, see:

- "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page"
- "Changing the Properties of a Dashboard and its Pages"
- "Dashboard Properties dialog"

This dialog is also displayed as:

Filters and Variables - page dialog

## Components

## **Embed New Hidden Dashboard Prompt**

Use this button to access the "Open dialog", which allows you to browse and select the named prompt that you want to add to the dashboard. After you select a prompt, its path displays in the Prompts Path table.

#### **Edit**

Use this button to access the "Open dialog", which allows you to browse and replace the currently selected prompt with another prompt. After you select another prompt, its path is displayed in the Prompts Path table.

#### Remove

Use this button to delete the selected prompt.

### **Prompt Path**

Displays the paths of the hidden prompts that you added to the dashboard. You can select a prompt and then click the Edit or Remove button to replace or delete the prompt.

# Dashboard Properties dialog

Use this dialog to change the properties of a dashboard and its pages.

For more information, see "Changing the Properties of a Dashboard and its Pages".

## Components

## Style

Use this option to select a style for the dashboard. Styles control how dashboards and results are formatted for display. The administrator might have created styles that you can choose from. If not, analyses are formatted using a default style.

For more information about styles, see Oracle Fusion Middleware System Administrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

## Description

Use this field to enter a description for the dashboard. Descriptions are displayed when administrators use the Catalog Manager. The description is not displayed on the dashboard.

#### Filters and Variables: Edit

Click this button adjacent to the Filters and Variables heading to display the "Dashboard Filters and Variables dialog", where you add hidden named prompts to the whole dashboard. See "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page".

#### Dashboard Report Links: Edit

Use this button to display the "Report Links dialog", where you select which links are to be displayed with all analyses on the dashboard, unless customized settings have been specified for an individual dashboard page or analysis.

#### Dashboard Pages

Displays the pages in the dashboard. Use this area to perform operations (such as hide or rename) on dashboard pages using the dashboard pages toolbar buttons.

## **Dashboard Pages Toolbar**

This toolbar contains the following buttons:

- **Rename** Use this button to display the "Rename dialog", where you specify a new name for the page in the dashboard.
- Select a prompt to capture default filters and variables Use this button to display the "Filters and Variables - page dialog", which allows you to add hidden named prompts to the dashboard page. See "Adding a Hidden Dashboard Prompt to a Dashboard or Dashboard Page".
- **Permissions** Use this button to display the "Permission dialog", where you specify which accounts have which levels of access to the contents of the dashboard page.

The **Permissions** button is displayed for shared dashboards only, and only if your user ID is authorized to access the security features.

- **Delete** Use this button to delete the page from the dashboard. After you click the button, you see a page that prompts you to confirm the deletion.
- Specify Who Can Save Shared Customizations Use this button to display the Permission dialog, where you specify which accounts can save shared customizations for the page.
- Specify Who Can Assign Default Customizations Use this button to display the Permission dialog, where you specify which accounts can assign default customizations for the page.

For more information on setting these permissions, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

**Note:** These operations are not reversed when you click **Cancel** in this dialog.

## **Hide Page**

Use this box to specify whether the page is to be displayed when the dashboard is shown. This option is helpful when you are working with a dashboard page and want to hide it from users until your changes are complete. When you select this option, the page remains visible to any users who are currently viewing it.

## **Show Add to Briefing Book**

Use this box to specify whether the **Page Options** menu for the page contains the **Add** to Briefing Book option. For more information on the Add to Briefing Book option, see "Dashboard page".

#### Reorder

Use these buttons to specify the order of the pages on the dashboard.

- To move a dashboard page up in the list, click the **Move Up** button. On the dashboard, this moves the tab for the page to the left.
- To move a page down in the list, click the **Move Down** button. On the dashboard page, this moves the tab for the page to the right.

# Dashboard page

Use a dashboard page to view and navigate a dashboard.

For more information, see:

- "What Are Dashboards?"
- "Opening and Using Dashboards"

## Components

#### Page Tabs

Use the tabs across the top of the viewer to select the dashboard page that you want to view and navigate.

#### **Toolbar**

The toolbar contains the **Page Options** button, which displays the following options:

Edit Dashboard — Use this button to display the "Dashboard builder", where you modify the dashboard, if you have the appropriate permissions.

Permissions to modify dashboards (personal and shared) are granted by the administrator.

For more information on the Dashboard builder, see "What Is the Dashboard Builder?"

- **Print** Use this option to print the current dashboard page as either HTML or
- **Refresh** Use this option to refresh the results of analyses included in the dashboard page.
- **Add to Briefing Book** (This option is not available on an empty dashboard page or if the **Show Add to Briefing Book** box in the "Dashboard Properties dialog" has not been selected for the page.) Use this option to display the "Save Briefing Book Content dialog", where you add the contents of a dashboard page to a briefing book.

For more information, see "What Are Briefing Books?" and "Adding Content to New or Existing Briefing Books".

**Create Bookmark Link** — Use this option to create a bookmark link.

This link is not available if the administrator has disabled it. For more information on controlling the display of this option, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For more information, see "What Are Bookmark Links?" and "Creating Links to Dashboard Pages".

**Create Prompted Link** — Use this option to create a prompted link.

This link is not available if the administrator has disabled it. For more information on controlling the display of this option, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For more information, see "What Are Prompted Links?" and "Creating Links to Dashboard Pages".

**Apply Saved Customization** — Use this option to apply a saved customization either a personal saved customization or a shared saved customization.

For more information, see "Applying Saved Customizations".

**Save Current Customization** — Use this option to save your current customization.

**Note:** Values that you pin for KPI dimensions referenced in scorecards are not saved with this option. For more information on pinning values, see "What Are Dimensions and Pinned Dimension Values?"

For more information, see "Saving Customizations".

Edit Saved Customizations — Displays the "Edit Saved Customizations dialog", in which you edit details of your saved customizations.

For more information, see "Editing Saved Customizations".

**Clear My Customization** — Use this option to clear your current customization. For more information, see "Clearing Your Current Customization".

# **Definition pane**

Use this pane to add, organize, and manage the prompt's columns. You can use column prompts, image maps, currency prompts, and variable prompts.

For more information, see:

- "Creating or Editing a Column Prompt"
- "Creating or Editing a Currency Prompt"
- "Creating or Editing an Image Prompt"
- "Creating or Editing a Variable Prompt"

This pane is part of the "Prompt editor".

## Components

### **Definition Table**

Use this table to view high-level information about the prompt's columns. You can also use this table to select columns for editing or deleting, arrange the order in which the prompts are displayed to the user, or insert row or column breaks between prompt items.

Note the following Definition Table components.

- **Label** This column displays the prompt label that you specified when creating the item. This field is read-only. To edit this field, select the table row and click the Edit button.
- **Type** This column displays the prompt type that corresponds to the item. The prompt types are: column, image, currency, or variable. This field is read-only.
- **Prompt For** This column displays the data column that corresponds to the item. This field is read-only.
- **Description** This column displays the items description that you entered in the Edit Prompt or New Prompt page. You can edit this column by placing your cursor in the field and typing.
- **Required** When this column contains a green check mark, it indicates that the user must select or enter a value for this prompt item. The content designer designates a prompt as required by Selecting the Require user input check box in the "New Prompt dialog". When no check mark is displayed in this column, the user does not have to select or enter a value and can select to skip the prompt item. This field is read-only.
- **New Column** This column indicates how the items in the prompt are structured on the page. When you select a prompt's New Column check box, the corresponding item is moved to a new column on the page and to the right of the item before it in the table. When you deselect the check box, the corresponding item is displayed below the item before it in the table.

#### **Toolbar**

The toolbar contains the following buttons:

- **Preview** Use this button to view and test the prompt. When you preview the prompt, it will display in a new browser window and include data from the subject area.
- New Click this button to add a column to the prompt. After you click this button, you then choose which prompt type you want to add (for example, Column Prompt or Image Prompt).

The page that displays after you click the **New** button will depend upon the prompt item type that you select. Note the following:

Select Column Prompt, Variable Prompt, or Currency Prompt to display the "New Prompt dialog".

The **Currency Prompt** option is available only if the administrator has configured the userpref\_currencies.xml file as described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

- Select **Image Prompt** to display the "Image Map Prompt Properties dialog".
- Open Click this button to display the "Open dialog", where you can open a saved Catalog object.
- **Insert Page Break** Click this button to insert a new prompts page after the selected prompt item. This functionality, as well as the New Column option in the Definition table, allows you to arrange a complex prompt into an intuitive, easy-to-use interface.
  - After you insert a new prompts page, you can highlight the page's row in the table and click the Edit button to display the "Edit Page Settings dialog". Use this dialog to modify the page title, instructions, and page formatting.
- Edit Click this button to display the "New Prompt dialog", where you can modify the prompts preferences. For example, click this button if you want to change a column's display option from Radio Button to Checkbox.
- **Delete** Click this button to delete the prompt item that you selected in the Definition Table.

# **Dimension Pinnings dialog**

Use this dialog to pin (or set) the value of one or more KPI dimensions. You set values of KPI dimensions, for example, when you add a strategy map that contains one or more KPIs that are dimensioned to a dashboard.

Pinning is optional. Typically, it is best not to pin most of the dimensions so that the data will be controlled by the point of view settings.

For more information, see:

- "What Are KPIs?"
- "What Are Dimensions and Pinned Dimension Values?"

## Components

#### **List of Dimensions**

Displays a list of the dimensions to be pinned.

To pin a dimension, click the down arrow to the right of the dimension and select one of the following options:

- A specific value
- Use Variable Use this option to display the "Select Variable dialog", where you specify a variable to use to set the value. For more information on variables, see "Using Variables".
- Not Pinned Use this option to specify that, initially, all dimension values are to be used. However, if, on a dashboard page, Scorecard, or KPI Watchlist, a control is provided, a user can dynamically change the value to explore the data.

# Display pane

Use this pane to view the prompt's layout and design. The Display pane is updated as you use the "Definition pane" to arrange the prompt items and the "Prompt editor" to add and modify prompt items. The items displayed in the Display pane do not access the prompt's data source and, therefore, do not include the columns' data selection options. To test the prompt with data selection options and view the resulting dashboard or analysis, click **Preview**.

For more information about creating and adding prompts, see:

- "Creating or Editing a Column Prompt"
- "Creating or Editing a Currency Prompt"
- "Creating or Editing an Image Prompt"
- "Creating or Editing a Variable Prompt"

This pane is part of the "Prompt editor".

## Components

#### **Edit**

Use this button to access the "Edit Page Settings dialog" to specify the prompt page's title and instructional text, as well as the text and tables formats (for example, font size, cell color, and border width).

# **Edit dialog**

Use this dialog to work with values as part of the "Select Values dialog".

## Components

#### Edit

Use this area to work with values in the following ways:

- Enter values into the list of selected values.
- Copy values from a previously saved list (for example a list of values in Excel) into the list of selected values.
- Copy values from the selected list of values.

Separate values that you enter with carriage returns (Enter key) or pipe (|) characters. Values that you copy in can be separated by carriage returns (the Enter key), | (pipe) characters, or tabs.

Press the Tab key to move the focus to the **OK** button.

# Edit Background Map dialog

Use this dialog to edit a map from the Background Maps tab of the "Administration: Manage Map Data page". Before editing a background map, add layers using the Layers tab. A background map is a non-interactive map that serves as a base for the map view. It might display a satellite image or a map with roads. (A background map is referred to as a "tile" in MapViewer.)

The functions of the Administration page are described in *Oracle Fusion Middleware* System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

# Components

#### Name

Use this field to enter the name of the map.

## Description

Use this field to enter a description of the map, which is displayed in the following locations:

- On the Maps tab of the Administration page.
- As a tooltip for the map when selecting a map from the list, when editing the map view.

## Interactive BI Layers area

Use this area to specify the layers from the Oracle Database that will be available on the map and their zoom level. The first time that you display this dialog after adding a map, this area lists any appropriate layers that are specified on the Layers tab, with their default zoom level settings.

The layers are listed from bottom to top, in terms of how they are applied to the map. A sample order is Countries, States, Cities. The lower level layers generally have the lower zoom levels. For example, if you have a States layer and a Cities layer, then include lower zoom levels for State than City.

This area contains the following components:

- Click the Add Layers button to display a list of the layers that have been imported on the Layers tab and associated with a BI column, then select the layers to add to the map. When you add a layer that is part of the map definition from MapViewer, the layer displays at its default zoom levels. If the layer is not part of the map definition, then specify the zoom levels yourself.
- Click the **Sort Layers By Zoom Level** button to list the layers in ascending or descending order based on visibility on the map. The sort order that is specified here does not affect the order in which layers are applied on the map. Instead, the sorting order affects the zoom levels. For example, the States layer might have zoom levels 1 through 3 and the Cities layer has zoom levels 4 through 9. The lower layers have the lower zoom level numbers. The zoom levels that you specify correspond to the tick marks on the zoom slider on the map.
- Click the Turn On Layer Visibility or Turn Off Layer Visibility button to control the visibility of layers on the map. Use the buttons to indicate whether the layer is visible in the Preview map in this dialog only. The layer is still visible on a map view. You can modify the zoom levels for a layer with a visibility turned off.

- Click a cell under a zoom level for a layer to see one of the following:
  - If you click a blue cell that is between other blue cells, then you see a popup menu with Clear Left and Clear Right buttons, which allow you to change the zoom level in either direction. For example, if you click the cell for zoom level 4 and click the eraser on the right, all cells to the right are cleared for that zoom level.
  - If you click a blue cell that at the end of a line of blue cells, then the cell turns white to indicate that it is no longer part of that zoom level.
  - If you click a white cell, then you increase the zoom level on either side of the existing blue cells. For example, suppose cells 4 through 6 are colored blue to reflect the zoom level. If you click in cell 2, then the zoom level becomes 2 through 6.

If you do not set any zoom levels for a layer, then that layer will not display on the

- Hover over the layer name to display a More menu from which you can make the following selections:
  - **Delete** Deletes the layer from the Interactive BI Layers area. The layer continues to be available on the Layers tab and can be added to this area again.
  - **Move Up** or **Move Down** Moves the layer up or down so you can specify the order in which layers are applied to the map.
  - **Reset to Default Visibility** Resets the current visibility range for this layer as defined in the underlying map definition. If this layer is not natively associated with the map, then this option is disabled for that layer.
- Use the yellow border that surrounds the column of boxes for a zoom level to determine which zoom level is currently displayed in the map area.

### Map area

Use this area to specify how the map will be displayed to users. Use the panning and zooming controls to affect the display of the map. If you hover over the zoom slider, then you see tooltips that specify the names of the layers that are currently associated with that zoom level.

# **Edit Briefing Book dialog**

Use this dialog to edit a briefing book. You can reorder content, delete content, and change the content type, the number of navigation links to follow, and the content description.

For more information, see:

- "What Are Briefing Books?"
- "Editing Briefing Books"

# Components

### Content

Displays the contents of the briefing book. To edit or delete content, select the content and then use the toolbar buttons. To reorder content, select the content and drag and drop it to the desired location.

### **Toolbar**

This toolbar contains the following buttons:

- Edit Page Use this button to display the "Page Properties dialog", where you can change the content type, the number of navigation links to follow, and the content description of the currently selected content.
- **Delete Page** Use this button to delete the currently selected content.

# **Related Topics**

"Adding Content to New or Existing Briefing Books"

"Downloading Briefing Books"

"Adding a List of Briefing Books to a Dashboard Page"

"Using Agents to Deliver Briefing Books"

# **Edit Column Formula dialog**

Use this dialog to:

- Specify custom text for headings for a column's folder and for a column.
- Specify the aggregation rule for the column totals for an attribute or measure columns or for a KPI-related formula.
- Edit the formula for an attribute or measure column. A column formula specifies what the column values represent. By editing this formula, you can present analysis results in a variety of ways.
- Create formulas that calculate KPI actual values, target values, and thresholds.

You cannot customize headings, specify the aggregation rule, or edit the formula for a hierarchical column or for a hierarchy level; however, you can specify a hierarchical column within a formula for an attribute or measure column.

For more information, see:

- "Editing the Formula for a Column"
- "What Are KPIs?"

# Components

### **Formula**

Use the "Edit Column Formula dialog: Column Formula tab" to customize headings, specify the aggregation rule, and edit the formula for a column.

### **Bins**

Use the "Edit Column Formula dialog: Bins tab" to combine values for the column into

# **Edit Column Formula dialog: Bins tab**

Use this tab of the "Edit Column Formula dialog" to perform "binning," which allows you to combine values for the column into sets. For example, suppose that the Region column has a value EASTERN. You can specify "My Home Region" instead as the text that displays for that value in the view that displays that column's data.

Binning differs from groups in that groups allow the view to display each member that is part of the group. For information, see "What are Groups?"

For more information, see "Editing the Formula for a Column".

# Components

#### Add Bin

Use this button to display the "New Filter dialog", where you can create a filter expression to display as a CASE statement in the Formula area of the "Edit Column Formula dialog: Column Formula tab".

You can combine multiple values or ranges of values from a given column into bins. When you add and name the bins, all instances of the various values that comprise the bin in the result set are replaced by the bin name. Aggregations are performed accordingly as well. For example, you can specify that all values over \$10M are displayed as "My10M."

#### **Bins List**

Displays the list of bins that you have created for this column using the **Add Bin** button. Use the following buttons within this list:

- **Edit Bin Filter** Displays the "Edit Filter dialog", where you can edit the filter for the bin.
- **Edit Bin Name** Displays a dialog in which you can edit the name for the bin.
- **Delete** Removes the bin from the list.
- Move Up or Move Down Moves the bin up or down one place within the list. The order of bins in the list is significant. You can include a certain value within multiple bins. However, the value is used only by the first bin that encounters it.

## Create a bin for all other values

Use this box to create an entry in the Bins list called "All other values" and to display the dialog in which you can enter a name for this bin. This bin includes all values that have not yet been included in another bin in the list. You cannot edit the filter for this bin nor can you reorder it. It must be the last bin in the list.

#### Treat result as a numeric value or expression

Use this box to indicate that binned numeric values that you specify are treated as numbers, rather than as the default of text. For example, suppose that you specify 35 as the bin name. If you do not select this box, then the name is treated as text, rather than as the number 35 when it is displayed in views. If you select this box, then the value 35 is treated as a number, which affects operations that are specific to data types such as sorting.

### Clear All

Use this button to remove the bins that you have created. When you click this button, a message prompts you to decide whether to keep the CASE statement in the formula on the Formula tab:

- If you select Yes, then you clear all bins from the Bins tab and the formula with the CASE statement is available for you to edit on the Formula tab.
- If you select No, then you clear all bins and the formula on the Formula tab returns to its default value.

## **Notes**

The Bins tab is not affected by the button bar in the Formula area in the Formula tab. However, if you create a CASE statement using the Bins tab, the button bar will be hidden when you click the Column Formula tab. The button bar is only displayed if you clear all bins.

# Edit Column Formula dialog: Column Formula tab

Use this tab of the "Edit Column Formula dialog" to:

- Specify custom text for headings for the column's folder and for the column.
- Specify the aggregation rule for the column totals for an attribute or measure columns or for a KPI-related formula.
- Edit the formula for an attribute or measure column. A column formula specifies what the column values represent, for example, "Sales Measures". "Dollars". By editing this formula, you can present analysis results in a variety of ways.
- Create formulas that calculate KPI actual values, target values, and thresholds.

For more information, see:

- "Editing the Formula for a Column"
- "How Are KPIs Evaluated?"

This dialog is also displayed as:

Edit Formula dialog

# Components

## **Folder Heading**

Not available for KPIs.

Use this field to enter the text for the heading for the column's folder. To enable this field, select the **Custom Headings** box.

### Column Heading

Not available for KPIs.

Use this field to customize the heading to reflect the data in the column. To enable this field, select the Custom Headings box. For example, if you want to change the column heading to "Dollars Increased by 10%", select the Custom Headings box and then, in the **Column Heading** field enter Dollars Increased by 10%.

### **Custom Headings**

Not available for KPIs.

Use this box to enable the Folder Heading and Column Heading fields so that you can customize the headings to suit your needs. For example, if you change the formula of a column, you might want to change the column heading to something that is more representative of the column.

### Aggregation Rule (Totals Row)

Use this box to select the aggregation rule for the:

- Column totals for attribute or measure columns. For example, if you want column totals to show the minimum value of the rows in the result set, then select Min. If you want them to show the sum of all the values in the result set, then select Sum, which is the default.
- KPI-related formula

For a list of the valid values, see "Aggregation Rules and Functions".

### **Available**

Displays the primary subject area as well as any related subject areas that have been added to the "Subject Areas pane". Use this area to select columns to use in formulas. To insert a column in a formula, select the column and click the **Add Column** button (the arrow button between the Available and Column Formula areas). Note that when you insert a column, if you have something highlighted in the Column Formula area, it will be replaced.

#### Column Formula

Use this area to perform these tasks:

- Create or edit the formula for an attribute or measure column.
- Create the formula to calculate a KPI actual value, target value, or range.

When you have text selected in the Column Formula box, it will be replaced by values that you select elsewhere, such as in the Available list or by inserting functions or filters. The selected text is also displayed in the Insert Function and Insert Filter dialogs when you invoke them.

You can enter the formula manually or use these components:

- f(...) Use this button to display the "Insert Function dialog", where you select a function from a tree of function groups. For example, you can build a formula based on a SQL function, such as RANK("Sales Measures"."Dollars").
  - For information about SQL functions, see Appendix A, "Logical SQL Reference."
- **Filter...** Use this button to display the "Insert Filter dialog", where you can add a SQL filter. For example, you can build a formula that uses the SQL FILTER function to filter the data, such as FILTER("Sales Measures". "Dollars" USING ("Markets"."Region" = 'EASTERN REGION').
- **Column >** Use this button to select a column from a list of the available attribute and measure columns that are included in the analysis criteria to use in the formula. This is helpful for example, if you have cleared the formula area and want to get back to where you started.
- Variable > Use this button to select the type of variable (Session, Repository, or Presentation) to add. The "Insert Variable dialog" is displayed, where you specify the name of the variable.
  - For example, you can build a formula using a presentation variable, such as "Sales Measures".Dollars + @{PercentIncrease}{1.50}, where PercentIncrease is the name of the presentation variable and 1.50 is its default value.
- + Use this button to insert the addition operator to add values.
- — Use this button to insert the subtraction operator to subtract values.
- **x**—Use this button to insert the multiplication operator to multiply values.
- / Use this button to insert the division operator to divide values.
- % Use this button to insert the percent sign to divide values by 100.
- ( Use this button to insert the left parenthesis to enclose data in brackets.
- ) Use this button to insert the right parenthesis to enclose data in brackets.
- Use this button to insert the concatenation operator.

### Treat as an Attribute Column

Available only for measure columns and only when the dialog is invoked from the Criteria tab. The default is that the box is not selected. Use this box to specify that a measure column be treated as an attribute column. This setting forces a Group By of the column values when the measure column is positioned outside the Measures area to an edge of the view This setting is not applied to a measure column in the Columns and Measures area of a table or the Measures area for a pivot table or graph.

This box is required to facilitate functionality in this release that specifies to not show all the detail when a measure column is moved to an edge but rather to aggregate the measure column to the grain of the edge. For example, aggregating dollar values to the Region grain.

Suppose that you have an analysis that contains the Region, Units, and Dollars columns. Using the Bins tab of the Edit Column Formula dialog for Units, you create one bin for values greater than or equal to 10 million and you specify that bin name as X. All other values use the bin name of Y. These bins create a CASE statement in the formula for this column.

When you display that analysis in a table on the Results tab, you see values for X and Y in the Units column. If you display that analysis in a pivot table with the Units column on the Measures edge, you also see values for X and Y. If you move the Units column to another edge, such as the Row edge of a pivot table, then you see only values for X. This is because the values of the column were aggregated for each region and none are now less than 10 million.

To resolve this problem and have views display data as in previous releases, you select the Treat as an Attribute Column box to specify that the measure column be handled as an attribute column, which prevents the aggregation of the values.

All analyses will be upgraded from Release 10g with all measure columns having the Treat as an Attribute Column box selected, to ensure that the measure columns are treated as attribute columns, as they were in Release 10g.

### **Notes**

To manually enter a variable in an expression in the Formula area, follow the guidelines for referencing variables in expressions that are described in Table 2–2.

# Related Topics

"Edit Column Formula dialog: Bins tab"

# **Edit Dimension Settings dialog**

Use this dialog to set up the control for a dimension in the point of view area of a scorecard. Specifically, you can specify:

- A default value for the dimension
- Whether a control for the dimension is to be displayed in the point of view area
- The label to be displayed in the point of view area for the dimension

For more information, see:

- "About the Point of View Area"
- "Setting Up the Point of View Controls"
- "Settings dialog: Dimension Settings tab"

# Components

#### **Dimension**

Displays the name of the dimension in the database, for example, "A - Sample Sales"."Products"."P1 Products".

#### Label

Use this field to enter a user-friendly label for the dimension's point of view control when no specific value has been set for the dimension. For example, you might enter Products for the dimension "A - Sample Sales". "Products". "P1 Products". Note that you do not need to specify a label for:

- A dimension that is pinned to a specific value (the value will be displayed instead). You can pin the dimension to a specific value using the Default Value
- A dimension for which you prevent the display of a control in the point of view area. (You use the **Prompted** field to prevent the display of a point of view control.)

## **Default Value**

Use this box to select one of the following options:

- A specific value for the dimension. If you specify a specific value, the value is for the dimension label.
- **Search** Use this option to display the "Search Members dialog", where you search for a value for the dimension.
- Not Pinned Use this option to specify that, initially, all dimension values are to be used. However, if you select the **Prompted** box, you later can change the value using the point of view control.

If you select a specific value and:

Prevent the display of a control for this dimension in the point of view area by deselecting the **Prompted** box, then you are pinning the dimension to a constant value for this scorecard, and users will not be able to change the value.

Display a control for this dimension in the point of view area by selecting the **Prompted** box, then you are pinning the dimension to an initial value for this scorecard, and users will be able to change the value.

### **Prompted**

Use this check box to specify whether a control for this dimension is to be displayed in the point of view area of the scorecard:

- Select this box to specify that a control for this dimension is to be displayed in the point of view area.
- Deselect this box to prevent the display of a control for this dimension in the point of view area. You should prevent the display of a control in the following cases:
  - If you have pinned the dimension to a specific value or to all dimension values and you do not want users to change this setting.
  - If a dimension that is equivalent to this dimension is used in another KPI in the Scorecard and this dimension should share a point of view control with the other dimension.

In this case, you must also complete the **Prompted By** box.

For example, suppose two KPIs used in the Scorecard both have a Quarter dimension. The Quarter dimensions have the same values but come from different databases. In this case, for one of the Quarter dimensions, you should deselect the **Prompted** box for one of the Quarter dimensions and in the **Prompted By** box select the other Quarter dimension so that both dimensions share one control.

**Note:** Before you set up dimensions to share a point of view control, ensure that their values match exactly. After you to set up the shared control, test the control to ensure that it sets the value of each dimension that it controls.

## **Prompted By**

This box is available only if you have deselected the **Prompted** check box. Use this box to select the dimension whose control in the point of view area this dimension is to share.

# **Edit Footer or Header dialog**

Use this dialog to specify the information for adding a footer or header to PDF and HTML output, when printing a dashboard page. Each header and footer can contain as many as three lines.

For more information, see:

"Print Options dialog"

"Changing the Properties of a Dashboard and its Pages"

# Components

### **Bold, Italic, Underline**

Use these buttons to apply Bold, Italic, or Underline to characters in the footer or header.

#### Line Break

Use this button to insert a line break between characters in the footer or header.

## **Contains HTML Markup**

Use this option to work with HTML codes, as described in "Working with HTML Markup".

### **Insert Field**

Use this menu to select a field to include in the header or footer, such as the author name, date, or page number.

#### Text

Use these fields to enter the text for the header or footer.

You can reference variables in these fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

## **Edit Format**

Click this button to display the "Edit Format dialog", in which you specify formatting for the text in the footer or header.

# Display in browser when applicable

Use this option to specify whether to display the header or footer in the HTML output. If you clear this box, then the header or footer is displayed in the PDF output only.

# Edit Layer dialog

Use this dialog to edit a layer from the Layers tab of the "Administration: Manage Map Data page". One important task is to associate the layer of spatial data with data for Oracle BI EE.

Spatial data is managed in MapViewer and stored in an Oracle Database. In order to display data for Oracle BI EE on a map, you must associate a spatial layer with the appropriate columns of data from the Oracle BI Server. The combinations of BI data columns are referred to as "BI Keys". When you associate the layer of spatial data with data for Oracle BI EE, that layer becomes available for use with the specified columns in the specified subject areas.

The functions of the Administration page are described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

# Components

#### Name

Use this field to enter the name of the layer.

#### Location

Displays the location of the layer in the data source from MapViewer.

#### Browse

Use this button to display the "Import Layers dialog", in which you select a source location to associate with the layer. Your selection is reflected in the **Location** box.

### Description

Use this field to enter the description of the layer, which is displayed in the following locations:

- On the Layers tab of the Administration page.
- When you hover over the layer name in the Map Formats area when editing the map.

### **Layer Key**

Use this box to select the column of spatial data from MapViewer to associate with data for Oracle BI EE. Each column value corresponds to a shape that is stored in the Oracle database. For example, a MY\_CITIES layer might have a layer key called CITY. By default, the selected value is a "best guess" at the appropriate column. Use the list to select the appropriate column.

Click the **Sample Data** link to display an actual value for that column that you can use as an example.

If the box is empty, then the administrator must define the key column for the shapes in the spatial table for that layer in MapViewer. The map is drawn only where common values exist between the spatial data column and the associated column of Oracle BI EE data. Otherwise, the map might show a white area to indicate a missing value. To verify that common values exist for the two columns, display the column of Oracle BI EE data in the Oracle BI Administration Tool and review its values. In

MapViewer, verify that the associated layer contains all the appropriate geometry definitions for the values in the corresponding column of Oracle BI EE data.

The following list provides the reasons why a white area might be drawn, using the country of Mexico as an example:

- The column has a null value for the country of Mexico, but a shape exists for Mexico in the spatial column.
- The column has a value for the country of Mexico, but no shape exists for Mexico in the spatial column.
- The column has a value for the country of Mexico and the shape exists for Mexico in the spatial column, but the names are mismatched. The BI column might have the value MEX and the spatial column might have MXC.

## BI Key Delimiter

Available only when multiple columns are specified for one key. Use this field to enter a single ASCII character (such as a comma or underscore) to function as a delimiter for combining the BI data columns that form a key.

## **Geometry Type**

Use this box to specify whether the layer is a point geometry layer or a polygon layer. The specification for a point or polygon layer affects the formatting that can be applied to that layer.

## **BI Key Columns Area**

Use this area to select the columns of data from the Oracle BI Server to associate with the layer. You can have multiple columns associated with a single layer. You can select multiple columns from one subject area or from multiple subject areas. The columns and delimiter that you select must exactly match the name of the Layer Key value. Suppose the Layer Key value is STATE\_CITY. You must select the STATE and CITY BI data columns and specify the underscore character as the delimiter for use in creating the BI Key to associate with the layer.

Click the following options:

- **Add New BI Key** Displays the list of available subject areas. When you select one, the "Select BI Key Columns dialog" is displayed in which you select one or more columns of BI data to associate with the layer.
- **Delete BI Key** Deletes the selected key from the Key area.
- Edit BI Key Displays the "Select BI Key Columns dialog" where you edit the BI data columns for the selected key.
- Sample Data Displays an actual value for that column that you can use as an example. Ensure that the values for the data column match those from the spatial data column.

When a content designer creates a map view, a default main map is selected as the basis for that map view. If at least one data column from the analysis is associated with a layer that is associated with a main map, then that main map is selected by default.

### **Show Qualified Names**

Use this box to specify whether to display the fully qualified name of the column in the BI Key Columns Area or simply the column name.

# **Edit Page Settings dialog**

Use this dialog to modify the page title, instructions, and page formatting. For more information, see "Definition pane".

# Components

## **Title**

Use this field to enter the title that you want to display on the prompt page. You can format this title by clicking the **Format** button.

### Instruction

Use this field to enter instructions for the prompt page. For example, "Use this page to specify sales measure prompt values."

### **Format**

Click this button to display the "Edit Format dialog", in which you specify the formatting options that you can apply to the prompt page. For example, you can specify a font size and style for the title and a background color for the cell.

# **Edit Parameter Filter dialog**

Use this dialog to edit a prompted filter that is associated with an analysis on which a condition is based.

For more information, see:

"Customize Condition dialog" "New Condition dialog"

# Components

#### **Filter**

Displays the name of the column on which the filter is built.

## Operator

Use this box to select the operator to apply to the value specified in the Value field. For guidelines on operators, see "Operators".

### Value

Use this field to specify the value to use when applying the filter. You can type a value or click the **Show list of values** button to search for one or more specific values.

To specify a session or repository variable as the value, click the **Value** label and select Session Variable or Repository Variable. The Value field label changes to either Session Variable or Repository Variable. Then, enter the name of the session or repository variable.

For more information on session and repository variables, see "Using Variables".

### Show list of values

Use this button to display the "Select Values dialog", where you can select one or more values from a list of available values.

### Add another filter value

Use this button to add another Value field.

### **Delete Filter Value**

Use this button to delete the corresponding value and field.

# **Edit Parameter Mapping dialog**

Use this dialog to edit the action parameters associated with an action.

For more information, see:

- "New Action Link dialog"
- "Action Link Properties dialog"
- "What Are Action Parameters?"

This dialog is also displayed as:

Add Existing Action dialog

# Components

#### **Define Parameters**

Use this area to define the action parameters. It includes the following components:

- **Name** Use this column to view or enter the name of the parameter.
  - For Navigate to a Web Page or Invoke an HTTP Request actions, to embed a parameter value anywhere within the URL, enter the token @{Name} where 'Name' is the value specified in the Name column below. There is no limit to the number of parameters that can be embedded.
- **Prompt** Use this column to enter the prompt to be displayed to users, if the user is to provide the parameter value.
- Value Use this column to enter the parameter value. Click the Change type of value button to select one of the following types of value and then specify the
  - **Value** Select this option to specify a value and then enter the value in the field.
  - **Session Variable** Select this option to use the value of a session variable, and then enter the name of the session variable in the field, or click the Show popular Session variables button (to the right of this field) and select a session variable from a list of commonly-used variables.
  - **Repository Variable** Select this option to use the value of a repository variable and then enter the name of the repository value in the field.
  - Request Column Select this option to display the "Choose Request Column dialog", where you select the column in an analysis whose value is to be used as the value of an action parameter.
    - This option is available only when you are editing the parameters for an inline action added to an agent that will be conditionally executed based on an analysis.
  - **Column Value** Select this option to use a column value in your analysis criteria and then click the **Column Value** button and select the column.
    - For example, suppose you have the Region and District columns in your analysis criteria and define an action link on the District column that maps a parameter to the Region column. When you execute that action link (by clicking on a district), the region value for that district is used. Note that in a

pivot table, the mapped values depend on the current layout or state of the

This option is available only when you are adding an inline action to an analysis.

For more information on session and repository variables, see "Using Variables".

- Fixed Use this column to specify whether to allow users to see but not set the parameter. Select this box to allow users to see but not set the parameter. Deselect this box to allow users to see and set the value.
- **Hidden** Use this column to specify whether to hide the parameter from users. Select this box to hide the parameter from users. Deselect this box to show the parameter to users.
- **Optional** Use this column to specify whether the parameter requires a value before the action can be executed. Select this box to make the value optional. Deselect this box to make the value required.
- Add Parameter Use this button to add a parameter. (Whether you can add a parameter for an action, depends on the action type.)
- **Delete Parameter** Use this button to delete a parameter.

# **Edit Saved Customizations dialog**

Use this page to edit the customizations saved for a dashboard page. You can:

- Rename customizations
- Change which customization to use as your default
- Change permissions for those customizations that have been shared with others
- Delete customizations

For more information, see:

- "What Are Saved Customizations for Dashboard Pages?"
- "Editing Saved Customizations"

# Components

#### **Saved Customizations**

This area displays the customizations, both personal and shared, that have been saved for the dashboard page.

To rename a customization, overwrite the old name with the new name.

To set a customization as your default, select the button in the My Default column for the customization. To have no personal customizations as your default, select the button in the My Default column for the No Personal Customizations entry.

### **Permissions**

Use this button to display the "Saved Customization Permissions and Defaults dialog", where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

#### **Delete**

Use this button to delete the selected customization.

# **Embedded Content Properties dialog**

Use this dialog to specify the URL and other information about content that you want to embed on a dashboard page.

For more information, see "Adding Content to Dashboards".

# Components

### **URL**

Use this field to enter the location and name of the content to embed.

These are examples:

```
http://www.oracle.com
/dashboardfiles/piegraph.xls
```

The URL that you specify should begin with http:// unless you plan to use an item that is saved on the Web server. If you use a network path to indicate the location of the item, then ensure that you use the exact path. Items that are embedded on a shared dashboard must be located on a network drive that is accessible to all users.

#### Width

Use this field to specify the width of the embedded content in the dashboard. Note the following about width and height specifications:

- If you do not specify a value, then the system uses the default settings (300 by 150 pixels). If you have only specified one value, then the system will use the default value for the non-specified value.
- You can specify the value in either pixels (px) or percent (%). Because browsers cannot fully interpret percent values, only the width percentage is rendered. If you specify the height in percentage, then 150 pixels is substituted for the height value.
- If you do not specify either pixels or percent, then the value is interpreted in pixels.
- You can enter spaces within the value. For example, you can enter either 130px or

## Height

Use this field to specify the height of the embedded content in the dashboard. Adjust the height setting for the best display results.

#### **Hide Scroll Bars**

Select this box to indicate that the scroll bars for the embedded content will not be displayed. If you do not select this box, then scroll bars are automatically added to the window if they are needed.

# **Enter Email Address dialog**

Use this dialog to add e-mail recipients who are to receive the delivery content of an agent.

For more information, see:

"Agent editor: Recipients tab"

# Components

# Email address for content delivery (separate multiple addresses with commas)

Use this field to enter the e-mail address of each e-mail recipient who is to receive the delivery content of the agent. Use commas to separate multiple addresses.

# **Enter Expression dialog**

Use this dialog to enter a variable expression or SQL query to use to set a gauge threshold.

For more information, see:

"Settings pane"

This dialog is also displayed as:

Enter SQL Query dialog

# Components

## **Expression**

Use this box to enter the expression or SQL query.

You can reference one or more presentation variables in the expression. For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables".

# Filter editor

Use this editor to create or edit a named filter.

For more information, see:

- "What are Filters and Selection Steps?"
- "What Is the Oracle BI Presentation Catalog?"
- "What Are Subject Areas and Columns?"

# Components

### **Subject Areas**

Use the "Subject Areas pane" to select the attribute column or measure column to be included in the filter. If your repository is configured for double columns, typically, you choose a display column on which to filter. However, you can choose a code column on which to filter but only if the code column is exposed in the Presentation layer in the Oracle BI EE repository. For more information on the Presentation layer, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business *Intelligence Enterprise Edition.* 

After you select a column, the "New Filter dialog" displays where you specify the new filter's criteria.

## Catalog

Use the "Catalog pane" to search for and drag and drop named filters from the catalog to the Filter editor. When you add a named filter to the Filter Editor, you are given the choice of either copying a catalog reference to the named filter or copying the named filter's contents to the analysis. When you include a reference to the named filter, you cannot modify the filter. When you include a copy of the named filter, you can modify the filter's contents and either save the filter as an inline or named filter.

### Saved Filter

Use this area to work with a filter just as you would in the "Filters pane".

# Filters pane

Use this dialog to create or edit a named filter or inline filter.

For more information, see:

- "What are Filters and Selection Steps?"
- "Creating or Editing Column Filters"
- "Combining and Grouping Column Filters"

This pane is part of the "Analysis editor: Criteria tab".

This pane also displays as the Saved Filter pane on the "Filter editor".

# Components

#### Filters Pane Toolbar

The toolbar contains the following buttons.

**Create a filter for the current subject area** — Use this button to choose an attribute column or measure column from a list of the columns that are currently selected for the analysis. You can also select the More columns option to display the "Select Column dialog", where you can select an attribute column or a measure column from the current subject area. If your repository is configured for double columns, typically, you choose a display column on which to filter. However, you can choose a code column on which to filter but only if the code column is exposed in the Presentation layer in the Oracle BI EE repository. For more information on the Presentation layer, see Oracle Fusion Middleware Metadata Repository Builder's *Guide for Oracle Business Intelligence Enterprise Edition.* 

After you select a column, the "New Filter dialog" displays where you specify the new filter's criteria.

- **Remove All Filters** Use this button to delete all of the filter items in the Filters pane. To delete a selected filter item, you must go to the listing of filter items in the Filters pane and click the Delete button for the item that you want to remove.
- **More Options** Click this button to access the following options:
  - Save Filters Use this option to save the filter and all of its contents to the catalog. Filters saved to the catalog are called named filters and can be added to other analyses and dashboards. If you save the filter as a named filter and then continue to work on the filter within the Filters pane, any changes that you make will not automatically be saved to the catalog. To re-save the named filter, you must again click the **Save Filters** option. Note that selecting the Save Filters option does not save the analysis and inline filter upon which you are working. To save the inline filter with the analysis, go to the Analysis Editor's toolbar and click the **Save** button.
  - **Add EVALUATE\_PREDICATE Function** Use this option to display the "New EVALUATE\_PREDICATE Function dialog", where you create a function.

### Filter Item Toolbar

The filter item toolbar is the collection of buttons that displays when you hover over a filter item within the list of filter items. It includes the following buttons:

- Edit Filter Use this button to display the "Edit Filter dialog", where you edit the filter item's criteria.
- **Copy Filter** Use this button to copy the filter item. When you click this button, a copy of the filter displays below the original filter item. You can use this functionality to save time by copying an existing filter item upon which to base a new filter item rather than creating a new filter item from scratch.
- **Delete** Use this button to delete the filter item.

### Operator

Click the operator to toggle between AND and OR. When you add a filter item, the default operator is AND. The AND operator means that the criteria specified in each filter must be met. This is the default method for combining column filters. The OR operator means that the criteria that is specified in at least one of the column filters must be met.

If you have specified three or more filters and click on AND, then Oracle BI EE automatically groups the filter item with the filter item above it. Grouped filters are indented in the filters list. You can click the operator to group the filters in several layers. Grouped filters are always processed before ungrouped filters.

## **Edit Filter Group**

This button displays when you hover over a collection of grouped filters. Use this button to specify what you want to do with the corresponding group. If you are working with a multi-level group, then ensure that you are clicking on the correct Edit **Filter Group** button. Note the following options:

- **Ungroup** Use this option to ungroup the highlighted filters group. If you are working with a group that has several layers of groupings, then clicking this option will only ungroup the highlighted group.
- **Delete Group** Use this option to delete the highlighted filter group from the filter.
- **Duplicate Group** Use this option to copy and paste the highlighted filter group. When you click this option, Oracle BI EE pastes the copy below the copied filter group. The copied filter group is also nested within the filter group from which it was copied.

# Folder Properties dialog

Use this dialog to add a view of a catalog folder and its contents, such as saved analyses, or a list of briefing books to a dashboard page. For example, if you have a collection of saved analyses that you run frequently, you can open the folder in the dashboard, navigate to a saved analysis, and click it to run it.

For more information, see:

- "Adding Content to Dashboards"
- "Adding a List of Briefing Books to a Dashboard Page"

# Components

### **Folder**

Displays the path to the folder whose view you want to add to the dashboard page, for example, /Shared Folders/Briefing Books. Click the Browse button to display the "Open dialog", where you select the folder.

## **Expand**

Use this option to specify whether to show an expanded view of the folder.

### **Show RSS Link**

Use this option to specify whether to add an RSS feed option to the folder.

The RSS feed option allows a user to access the dashboard's catalog folder from an RSS 2.0 compatible reader that supports HTTP basic authentication. If Oracle BI Presentation Services uses HTTPS protocol, then the RSS Reader that you use must also support the HTTPS protocol. An RSS reader is a third-party program that allows the user to aggregate information from different web-based locations into one browser window (for example, news feeds or events listing).

When the RSS link is added to the dashboard's catalog folder, an XML button that provides the catalog's URL is displayed for that folder. When a user accesses a catalog folder from an RSS reader, the reader prompts the user to log in to the Oracle BI Server.

You can include an RSS feed option to a catalog folder that is displayed on a dashboard page. Users must have the proper privilege to add the RSS feed option to a dashboard page's catalog. The RSS Feeds privilege is granted by the administrator.

# Folders pane

Use this pane to display and navigate the content of personal (My Folders) and shared folders that all users can access. Administrators can display the catalog root folder that contains all system, object, and user data and settings. You can also use this pane to move objects by dragging and dropping them to different areas within the Catalog. You can drag and drop objects within the Folders pane or from the Folders pane to the "Catalog area".

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"

This pane is part of the "Catalog page".

# Components

#### **Show Folder Tree**

Use this button to display all folders in hierarchical directories.

### **Show Quick Access Folders**

Use this button to list, excluding their hierarchy, these folders:

- **My folders** Contains all the objects that you have created.
- **Shared folders** Contains folders for agents, common objects such as reports, and the contents of the subject area.
- My *<object>* folder Depending on the object, contains all the analyses, reports, agents, and scorecards that you have created or modified, or the agents to which you are currently subscribed. (Note that agents that you have been designated a recipient of are not included in the My Agent Subscriptions folder.)

### My Folders

Contains all of your personal folders.

### **Shared Folders**

Contains folders to which you have the permissions to access.

# Font Format: Item dialog

Use this dialog to set formatting properties for a graph, such as the font family for text. For more information, see "Graph Properties dialog: Titles and Labels tab".

**Note:** Depending on what you are formatting, this dialog might be displayed without tabs. If so, then it contains only the components in the "Font Format: Item dialog: Font Format tab".

# Components

## **Display Options**

Use "Font Format: Item dialog: Display Options tab" to set properties for the display of titles, scale labels, and data labels.

#### **Font Format**

Use the "Font Format: Item dialog: Font Format tab" to set properties for displaying

### **Number Format**

This tab is not available for the vertical axis 2 of a pareto graph.

Use the "Font Format dialog: Number Format tab" to override the default numeric format in which data labels are currently displayed.

# Font Format: Item dialog: Display Options tab

Use this tab of the "Font Format: Item dialog" to set properties for the display of titles, scale labels, and data labels in a graph.

For more information, see:

- "Graph Properties dialog: Titles and Labels tab"
- "Gauge Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Format: Item dialog: Display Options tab

# Components

#### Truncate

This box is available only for titles.

Use this box to specify whether items are to be automatically truncated or truncated by a specified number of characters. If you select **Specify**, then enter the number of characters in the **characters** field.

### **Label Orientation**

This box is available only for scale labels.

Use this box to select the number of degrees scale labels are to be rotated.

## **Abbreviate**

This box is available only for scale and data labels. It is not available for the vertical axis 2 of a pareto graph.

Use this box to select the abbreviation to use for scale and data labels. For example, if you select Million(m) for a scale label of 120,000,000, then the label is abbreviated to 120M.

### **Show Data Labels**

This box is available only for data labels.

Use this box to specify whether to hide or show data labels. Data labels are displayed when you hover the mouse over elements in a graph or gauge.

Data labels are enabled by default for selected 2D graph types. Data labels have no effect on graphs such as 3D bar and column.

# Font Format: *Item* dialog: Font Format tab

Use this tab of the "Font Format: Item dialog" to set properties for displaying text.

For more information, see:

- "Graph Properties dialog: Titles and Labels tab"
- "Gauge Properties dialog: Titles and Labels tab"

This dialog is also displayed as:

Font Format: *Item* dialog

# Components

### **Toolbar**

The toolbar contains the following buttons:

**Clear Cell Format (restore defaults)** — Use this button to remove the specifications that you have made and to return the settings to the values that they had when defaults were last saved.

The Clear Cell Format (restore defaults) and the Copy Cell Format buttons affect the settings in the following ways:

- If the dialog has no tabs, then the button affects all the settings in the dialog.
- If the dialog has multiple tabs, then the button affects only those settings in the tab in which the button is displayed.
- **Copy Cell Format** Use this button to copy the formatting specifications from the dialog, so that you can apply them elsewhere.
- **Paste Cell Format** Use this button to paste the formatting that you have copied into the appropriate location.

### Family

Use this box to select the font family.

### Size

Use this field to enter the font size.

### Color

Use this box to select the font color.

## Style

Use this box to select the font style, such as bold or italic.

### **Effects**

Use this box to select the font effects, such as underline or strike through.

# Font Format dialog: Number Format tab

Use this tab of the "Font Format: Item dialog" to override the default numeric format in which data labels are currently displayed.

**Note:** The numeric format is inherited from the representative column in the Criteria tab. If two or more columns are selected for the same axis, then numeric formatting is not inherited.

For more information, see:

"Graph Properties dialog: Titles and Labels tab" "Gauge Properties dialog: Titles and Labels tab"

# Components

### **Override Default Data Format**

Use this box to specify that you want override the default numeric format in which data labels are currently displayed.

## **Treat Numbers As**

Use this box to specify whether data labels are numbers, percentages, or currency.

# **Currency Symbol**

This box is available only if you select **Currency** in the **Treat Numbers As** box.

Use this box to select the currency symbol to show in data labels.

### **Negative Format**

Use this option to specify whether to display negative data labels using a minus sign (for example, -123) or parentheses (for example, (123).

## **Decimal Places**

Use this box to select the number of decimal places (to a maximum of 6) in which to display numbers (for example, 120,000,000.000).

### Use 1000's Separator

Use this box to specify whether to separate each magnitude of a thousand by a comma. (for example, 1,000,000,000.00

# **Gauge Properties dialog**

Use this dialog to edit the properties of gauge.

For more information, see:

"Editing Gauge Views"

# Components

### **Canvas**

Use the "Gauge Properties dialog: General tab" to set properties related to the gauge canvas, such as, legend location.

## Style

Use the "Gauge Properties dialog: Style tab" to set properties that control the appearance of the gauge, such as width and height of the gauge.

### Scale

Use the "Gauge Properties dialog: Scale tab" to set properties for gauge limits and tick marks.

### **Titles and Labels**

Use the "Gauge Properties dialog: Titles and Labels tab" to set properties that control the display of titles, footers, and labels for the gauge or gauges in a gauge set.

# Gauge Properties dialog: General tab

Use this tab of the "Gauge Properties dialog" to set properties related to the gauge canvas, such as legend location.

For more information, see:

"Editing Gauge Views"

# Components

### **Gauges Per Row**

Use this field to enter the number of gauges display per row in a gauge set.

## Legend Location

Use this box to specify whether a legend is to be displayed and its location. Select one of the following options:

- **Default** Use this option to display the legend in the default location, that is, to the right of the gauge canvas.
- **None** Use this option to specify that no legend is to be displayed.
- **Top** Use this option to display the legend at the top of the gauge canvas.
- **Right** Use this option to display the legend to the right of the gauge canvas.
- **Bottom** Use this option to display the legend at the bottom of the gauge canvas.
- **Left** Use this option to display the legend to the left of the gauge canvas.

# **Listen to Master-Detail Events**

Use this box to specify whether the gauge is to act as a detail view in a master-detail relationship and listen for master-detail events. This box also displays the Event Channels field.

To specify that a gauge is to act as a detail view in a master-detail relationship and listen for master-detail events, select this box and then specify the channel or channels in the **Event Channels** field.

For more information on master-detail relationships, see "What is Master-Detail Linking of Views?"

## **Event Channels**

This field is displayed only if you select the Listen to Master-Detail Events box.

Use this field to enter the name of one or more channels on which the gauge is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

# Gauge Properties dialog: Style tab

Use this tab of the "Gauge Properties dialog" to set properties that control the appearance of the gauge, such as width and height of the gauge.

For more information, see:

"Editing Gauge Views"

# Components

## Dial Arch Length

This box is available only for dial gauges.

Use this field to enter length of the dial arc in degrees. The maximum value is 360 degrees.

## Gauge Size

Use this box to specify the size of the gauge — Fit to Canvas, Small, Medium, Large or Custom.

If you select **Custom**, then you must complete the **Width** and **Height** fields, where you specify the width and height in pixels.

### Width

This field is enabled only when you select **Custom** in the **Gauge Size** box.

Use this field to enter the width of the gauge in pixels.

### Height

This field is enabled only when you select **Custom** in the **Gauge Size** box.

Use this field to enter the height of the gauge in pixels.

### Marker Type

This area is available only for dial gauges.

Use this area to specify, for each measure in the gauge, the type and color of the indicator. The indicator is the part of the gauge that points to the value that is plotted.

In the first box, select the type of indicator and then, in the second box, select the color. The types of indicators are:

- **Needle** Use this option to use a needle to point to the value that is plotted.
- **Line** Use this option to use a line to point to the value that is plotted.
- Fill Use this option to fill the area inside the dial gauge to the value that is plotted. This option is ignored if the gauge has thresholds or if the gauge shows more than one measure column.

### Gauge Colors and Border: Background

This box is available only for dial gauges.

Displays the Color Selector dialog, where you select the color for the gauge background.

# Gauge Colors and Border: Border

This box is available only for dial gauges.

Displays the Color Selector dialog, where you select the color for the border around the gauge.

# Canvas Colors and Border: Background

Displays the Color Selector dialog, where you select the color for the canvas background.

## **Canvas Colors and Border: Border**

Displays the Color Selector dialog, where you select the color for the border around the canvas.

# Gauge Properties dialog: Scale tab

Use this tab of the "Gauge Properties dialog" to set properties for the following parts of a gauge:

- **Gauge limits** The minimum and maximum points on the gauge value axis.
- Tick marks The markings along the value axis of the gauge. They can identify regular intervals, from the minimum value to the maximum value, and can also indicate threshold values. (You set threshold values in the "Settings pane".)

For more information, see:

"Editing Gauge Views"

# Components

### **Gauge Limits**

Use this area to specify the gauge limits as follows:

- Select the **Default** box to use the default gauge limits.
- Select the **Specify** box to specify custom gauge limits. Then, in the **Minimum** field enter the lowest point and in the **Maximum** field enter the highest point.

Click the Customize Gauge Limit button to the right of the Minimum or Maximum field to display the "Customize Gauge Limit dialog", where you specify the custom gauge limit. You can specify the limits as an actual value or a percentage.

### Tick Type

Displays the following options to specify the number of tick marks to display:

- **Dynamic** Select this box to let the system automatically calculate (based on the data) the number of tick marks to display.
- **Specify** Select this option to specify the number of tick marks to display.

### **Show Major Ticks**

This box is not available for bulb gauges.

Use this box to specify whether major tick marks are to be shown.

To show major ticks, select this box and then specify the number of major tick marks to show.

### **Show Minor Ticks**

This box is not available for bulb gauges.

Use this box to specify whether to show minor tick marks.

Minor tick marks show only in dial gauges that show one measure.

To show minor ticks, select this box and then specify the number of minor tick marks to show.

## Gauge Properties dialog: Titles and Labels tab

Use this tab of the "Gauge Properties dialog" to set properties that control the display of titles, footers, and labels for a gauge or gauges in a gauge set.

If the canvas consists of a gauge set, then titles and footers are displayed for each gauge. Titles and footers are optional.

For more information, see:

"Editing Gauge Views"

## Components

## **Gauge Set Title: Title**

Use this field to enter the title for the gauge or gauge set. The title is displayed at the top of the canvas.

## Use measure name as graph title

Use this box to use the name of the measure column or columns (for example, Dollars) for the title of the gauge or gauge set.

## **Gauge Titles: Title**

Use this field to enter a title to be displayed above each gauge.

You can use a token (@n) to include the results from the designated column in the gauge title. For example, @1 inserts the results from the first column, and @3 inserts the results from the third column.

#### **Gauge Titles: Footer**

Use this field to enter a footer to be displayed beneath each gauge.

You can use a token (@n) to include the results from the designated column in the gauge footer. For example, @1 inserts the results from the first column, and @3 inserts the results from the third column.

#### **Format Title**

Use this button (which is displayed next to each Title field and the Footer field) to display the "Font Format: Item dialog", where you can format the title or footer.

#### **Format Label**

Use this button (which is displayed next to the Legend, Scale Labels and Data Labels labels) to display the "Font Format: Item dialog", where you can format the legend, scale labels, or data labels.

The **Format Label** button for scale labels is not available for bulb gauges.

## **Getting Started pane**

Use this pane to learn how to use Oracle Scorecard and Strategy Management to drive and assess corporate performance, to link to the Oracle Business Intelligence glossary, and to link to information about how to create scorecards.

For more information, see "Viewing Overview Information".

This pane is part of the "Scorecard editor: Overview tab".

## Components

#### Overview

Use this link display overview information about scorecarding.

## **Glossary of Terms**

Use this link to display a glossary of Oracle Business Intelligence terms.

#### How do I?

Use link to display information on how to create scorecard components, such as objectives, initiatives, perspectives, and views.

## **Graph Properties dialog**

Use this dialog to edit the properties of a graph.

For more information, see:

"Editing Graph Views"

## Components

## **Canvas**

Use the "Graph Properties dialog: General tab" to set properties related to the graph canvas, such as legend location.

## Style

Use the "Graph Properties dialog: Style tab" to set properties that control the appearance of the graph, such as the style.

#### Scale

Use the "Graph Properties dialog: Scale tab" to set properties for axis limits and tick marks.

#### **Titles and Labels**

Use the "Graph Properties dialog: Titles and Labels tab" to set properties that control the display of titles and labels for the graph.

## **Graph Properties dialog: General tab**

Use this tab of the "Graph Properties dialog" to set properties related to the graph canvas, such as legend location.

For more information, see:

"Editing Graph Views"

## Components

#### **Canvas Width**

Use this field to enter the width of the graph canvas in pixels.

## **Canvas Height**

Use this field to enter the height of the graph canvas in pixels.

## **Legend Location**

Use this box to specify whether a legend is to be displayed and its location. Select one of the following options:

- **Default** Use this option to display the legend in the default location, that is, to the right of the graph canvas.
- **None** Use this option to specify that no legend is to be displayed.
- **Top** Use this option to display the legend at the top of the graph canvas.
- **Right** Use this option to display the legend to the right of the graph canvas.
- **Bottom** Use this option to display the legend at the bottom of the graph canvas.
- **Left** Use this option to display the legend to the left of the graph canvas.

#### **Zoom and Scroll**

This component is not supported for radar, funnel, and pie graphs.

Use this area to specify whether to enable zooming and scrolling on the horizontal and vertical axes:

- **Enable for Horizontal Axis** Use this option to enable zooming and scrolling on the X axis.
- **Enable for Vertical Axis** Use this option to enable zooming and scrolling on the vertical axis.

When you enable zooming and scrolling for an axis, the **Zoom** button (from which you can zoom and scroll) is displayed in the graph area when you hover the mouse over the graph.

For more information on how to zoom and scroll, see "Zooming and Scrolling in Graphs".

#### **Listen to Master-Detail Events**

Use this box to specify whether the graph is to act as a detail view in a master-detail relationship and listen for master-detail events. This box also displays the Event Channels field.

To specify that a graph is to act as a detail view in a master-detail relationship and listen for master-detail events, select this box and then specify the channel or channels in the **Event Channels** field.

For more information on master-detail relationships, see "What is Master-Detail Linking of Views?"

## **Event Channels**

This field is displayed only if you select the Listen to Master-Detail Events box.

Use this field to enter one or more channels on which the graph is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

## **Animate graph on Display**

This box is not supported for funnel graphs.

Use this box to specify whether to show an initial rendering effect. The rendering effect varies from graph to graph. In a horizontal graph, for example, the bars start at the horizontal axis and move up to the current measurement level.

## **Graph Properties dialog: Scale tab**

Use this dialog of the "Graph Properties dialog" to set properties for the following parts of a graph:

- **Axis limits** The minimum and maximum points on the vertical and horizontal
- Tick marks The markings along the value axes of the graph. They can identify regular intervals, from the minimum value to the maximum value.

This tab is not available for pie graphs or funnel graphs.

For more information, see:

"Editing Graph Views"

## Components

**Note:** If a graph has both vertical and horizontal axes (for example in a scatter graph) or two vertical axes (for example in a line-bar graph), this tab contains sub-tabs so that you can set the scale properties for both axes.

#### **Axis Limits**

This area is disabled for a pareto graph.

Use this box to specify the limits of the vertical or horizontal axis. Select one of the following options:

- Default (Dynamic) Use this option to let the system determine the scale and set the axis to zero for positive numbers.
- Specify Use this option to specify to the minimum and maximum axis limits. Then in the **Minimum** field, enter the minimum axis limit and in the **Maximum** field, enter the maximum axis limit.

### **Tick Type**

Displays the following options to specify the number of tick marks to display:

- **Dynamic** Select this box to let the system automatically calculate (based on the data) the number of tick marks to display.
- **Specify** Select this option to specify the number of tick marks to display.

Note that the color you select color for the horizontal and vertical gridlines on the "Graph Properties dialog: Style tab"also is applied to the major and minor tick marks.

#### **Show Major Ticks**

Use this box to specify whether to show major tick marks. If you select this box, then specify the number of major tick marks to show.

## **Show Minor Ticks**

This box is disabled for vertical axis 2 of a pareto graph.

Use this box to specify whether to show minor tick marks. If you select this box, then specify the number of minor tick marks to show.

## Use logarithmic scale

This box is disabled for a pareto graph.

Use this box to specify whether to use a logarithmic scale.

## **Click to edit Scale Markers**

Displays the "Scale Markers dialog", where you define the scale markers for the graph.

## **Notes**

- For a time series line graph, you cannot set scale properties (that is, axis limits or major and minor ticks) for the horizontal axis.
- For a Pareto graph, you cannot specify:
  - Axis limits for either vertical axis 1 or vertical axis 2
  - Whether to show minor tick marks for vertical axis 2
  - Whether to use a logarithmic scale

By definition, vertical axis 2 of the pareto graph ranges from 0% to 100%. In addition, vertical axis 1 is synchronized with vertical axis 2, so it cannot be changed.

## **Graph Properties dialog: Style tab**

Use this dialog of the "Graph Properties dialog" to set properties that control the appearance of the graph, such as the style.

For more information, see:

"Editing Graph Views"

## Components

## Style

This box is not enabled for bubble and radar graphs.

Use this box to select the graph style. The options are:

- For bar, line-bar, or pareto graphs: Default, Rectangle, Triangle, Cylinder, Diamond, Gradient or Pattern Fill
- For a line or time-series line graph: **Default, Standard Line, Stepped Line,** or **Curved Line**
- For an area or pie graph: Default, Solid Fill, Gradient Fill, or Pattern Fill
- For a scatter graph: Default, Standard Scatter, or Scatter-with-Lines

## Style and Conditional Formatting

Displays the "Style and Conditional Formatting dialog", where you specify formatting.

## 3D

Use this box to specify whether the graph is to be three-dimensional.

#### Plot Area: Background

Displays the Color Selector dialog, where you select the color for the plot area background.

#### Gridlines

Use these boxes to specify whether to display the default gridlines or gridlines that you specify.

If you select the **Specify** option, then, for the major grid and for the minor grid, specify the gridlines that you want and their color using the following boxes:

- **Horizontal Line** Use this box to display a horizontal gridline.
- **Vertical Line** Use this box to display a vertical gridline.
- **Color** Displays the Color Selector dialog, where you select the color for the horizontal and vertical gridlines. This color also is applied to the major and minor tick marks, which you specify on the "Graph Properties dialog: Scale tab".

If you select the **Specify** option only and do not select any checkbooks for the major and minor grid, no gridlines (not even the ones shown by default) are displayed.

Note that, for a pareto graph, enabling the horizontal major or minor gridlines shows only the gridlines corresponding to vertical axis 1.

## Legend: Background

Displays the Color Selector dialog, where you select the color for the legend background.

## **Legend: Transparent**

Use this box to specify whether the legend is transparent (that is, has no background color).

## Legend: Border

Displays the Color Selector dialog, where you select the color for the border around the legend.

## **Canvas Colors and Borders: Background**

Displays the Color Selector dialog, where you select the color for the canvas background.

#### Canvas Colors and Borders: Show Gradient

Use this box to specify whether the canvas background color is to gradually fade from the specified color at the top to white at the bottom.

## **Canvas Colors and Borders: Border**

Displays the Color Selector dialog, where you select the color for the border around the canvas.

## **Graph Properties dialog: Titles and Labels tab**

Use this dialog of the "Graph Properties dialog" to set properties that control the display of titles and labels for the graph.

For more information, see:

"Editing Graph Views"

## Components

#### Title

Use this field to enter a title for the graph.

## Use measure name graph title

Use this button to specify whether to use the measure name or names as the graph title.

#### **Vertical Axis 1 Title**

Use this field to enter a title for the vertical axis 1.

#### Use measure name axis title

Use this button to specify whether to use the measure name or names as the vertical axis 1 title.

## **Vertical Axis 2 Title**

Use this field to enter a title for the vertical axis 2.

#### Use measure name axis title

Use this button to specify whether to use the measure name or names as the vertical axis 2 title.

#### **Horizontal Axis Title**

Use this field to enter a title for the horizontal axis.

#### Use column name axis title

Use this button to specify whether to use the column name or names as the horizontal axis title.

#### **Format Title**

Use this button (which is displayed next to each Title field) to display the "Font Format: Item dialog", where you can format the title.

## **Format Label**

Use this button (which is displayed next to the Legend, Vertical Axis 1 Scale Labels, Vertical Axis 2 Scale Labels, Horizontal Axis Labels and Data Labels labels) to display the "Font Format: Item dialog", where you can format the legend, scale labels, or data labels.

## **Notes**

For time series line graphs, no data formatting options are available for the time axis labels or data labels. You can modify font characteristics, but any other formatting selections will be ignored.

For a time series line graph, labels that display on the time axis are locale-sensitive. For example, month and day names use the appropriate locale-sensitive short names.

## **Graphics dialog**

Use this dialog to select images to display for the following:

- Individual KPI performance thresholds
- A column cell

You can select a standard image or manually enter a path to a custom image.

## Components

## No Image

Use this box to indicate that no image is included in the column's layout. If you are creating a KPI threshold, select this option to display only KPI values and omit symbols that reflect performance levels or states.

## **Custom Image**

Use this field to specify a custom image to include in the column's layout or with the KPI threshold. To do so, enter one of the following:

- The URL to a custom image.
- The fmap syntax to reference a custom image that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them".

**Note:** If you are working in a secured environment, then you must specify a custom image that is stored locally in the Oracle Business Intelligence environment using the fmap syntax. (A secured environment is one in which the HardenXSS element is set to true in the instanceconfig.xml file. See your administrator for more information.)

The custom image should be one that is accessible to all users who will view or edit the scorecard.

Custom images can be used for both conditional and unconditional column results.

#### Select Standard Image

Use this pane to select an image distributed with Oracle Business Intelligence. To select an image, click the radio button next to the image that you want to include in the column. These images are useful in conditional formatting, such as meters and trend arrows. The left pane shows the categories of images. When you click an image category, the right pane shows the images in that category.

#### Image Placement

Use this field to specify where you want the image to be displayed relative to the column's data or heading.

Select **Choose Image Only** if you want the column to contain the image without the text. Choose Default to use the image's default position, which is usually to the left of the column's data or heading.

## Home page

## Use this page to:

- Quickly navigate to the area of the application where you can complete a specific task (for example, create a dashboard).
- Access your objects or the objects to which you have been given permission to view or edit.
- View your alerts.
- Access Oracle Business Intelligence documentation and other Oracle product information.
- Download Oracle applications that can integrate or interact with Oracle BI EE.
- Quickly perform pre-defined searches (for example, search for all of your dashboards or Scorecard objects) or access the full-text catalog search option.

#### For more information, see:

- "Accessing and Managing Your Alerts"
- "What Is the Oracle BI EE Home Page?"
- "What Is the Oracle BI Presentation Catalog?"

## Components

#### Create...

Provides links to initiate the most popular creation tasks by category (for example, Published Reports or Actionable Intelligence). Click the More link to access a list of the category's other creation tasks. Oracle BI EE populates this list of categories based on what is installed on your company's system and the pieces to which you have been given the rights to access.

#### Browse /Manage...

Provides the ability to search the folders and objects to which you have permission to access. You can click the Catalog Folders [Search] link to access the catalog search interface where you can search for an object by name, location, and type. For more information about the catalog and how to search it, see "Managing Objects in the Oracle BI Presentation Catalog".

This section also gives you the ability to quickly perform pre-defined searches of the catalog by clicking any folder/binocular button. For example, click My Scorecards folder/binocular button to access a list of all of the Scorecard objects located in your My Folders location. After you click a folder/binocular button, the Catalog page displays and contains the results of your search, as well as the pre-defined search's criteria defaulted into the Search fields.

#### Get Started...

This section contains the following links:

**Oracle BI EE Documentation** — Click this link to access the Oracle Business Intelligence documentation library, which contains the complete set of Oracle BI EE guides in HTML and PDF formats.

- **Help Table of Contents** Click the drop down button to choose which product document's table of contents you want to access. Oracle Fusion Middleware User's Guide for Oracle Business Intelligence Enterprise Edition displays in this list, as well as the tables of contents for products that integrate with Oracle BI EE (for example, Oracle Business Intelligence Publisher Enterprise and Oracle Marketing).
- **Oracle Technology Network** Click this link to access the Oracle Technology Network (OTN), where you can search for technical articles about Oracle products, participate in discussions about Oracle products, ask the user community technical questions, and search for and download Oracle products.
- **Download BI Desktop Tools** Displays options that allow you to integrate with Microsoft Office. The options available depend on the products that you are eligible to download:
  - **Oracle BI for MS Office** Use this option to download Oracle Business Intelligence Add-in for Microsoft Office, which enables you to access and run Oracle BI EE analyses directly within your Microsoft Office workspace. For information on installing and configuring the Oracle Business Intelligence Add-in for Microsoft Office, see Appendix D, "Integrating with Microsoft Office."
  - **Template Builder For Word** Use this option to download the Template Builder For Word add-in, which facilitates the design of RTF templates for use in published reporting. For more information, see "Creating an RTF Template Using the Template Builder for Word" in the Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.
  - **Analyzer For Excel** Use this option to download the Analyzer For Excel add-in, which enables you to download the results of a report query to Excel and also to upload a spreadsheet to use as a report layout. For more information, see "Using the BI Publisher Analyzer for Excel" in the Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher.
  - Oracle Hyperion Smart View for Office Use this option to download the Oracle Hyperion Smart View for Office add-in, which enables you to view, import, manipulate, distribute and share data in Microsoft Excel, Word and PowerPoint. For information on configuring to download Oracle Hyperion Smart View for Office, see "Configuring to Download Oracle Hyperion Smart View for Office" in the Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

After you have installed or configured a product, the product download link will no longer display in the list.

#### **Alerts**

(This section is available only when one or more alerts are delivered to the Oracle BI EE Home page.)

Displays your alerts (up to a maximum of five), including the priority (High, Normal, or **Low**) and last delivery date and time for each alert.

To view the latest occurrence of an alert, click its name. The "Alert dialog" is displayed, where you can view information about the alert as well as the content of the alert. You can also edit and run the agent that generated the alert, if you have the appropriate permissions.

Each alert has the following links:

- **View** Use this link to display the Alert dialog, where you can view information about the alert as well as the content of the alert. You can also edit and run the agent that generated the alert, if you have the appropriate permissions.
- **Clear** Use this button to delete the alert.
- **More** Displays the following options:
  - **Edit Agent** (This option is available only if you have permission to modify the agent.) Use this option to display the agent in the "Agent editor", where you can edit the agent.
  - **Run Agent** (This option is available only if you have permission to execute the agent.) Use this option to run the agent that generated the alert.
  - **Subscribe to this feed** Use this option to display the browser's page that lets you subscribe to an RSS feed. Using this page, you can subscribe to an Oracle BI Alerts feed (that is, the channel that contains the delivered agents). For more information, see "Subscribing to an RSS Feed for Alerts".
  - **View all alerts** Use this option to display the "Alerts dialog", where you can view and manage all your alerts.

If more than five alerts have been delivered, the **View All Alerts** link is displayed. Click this link to display the "Alerts dialog", where you can view and manage all your alerts.

To configure an agent to deliver an alert to the Home page, you must select the Home Page and Dashboard option on the "Agent editor: Destinations tab". For more information about creating agents, see "Creating Agents".

#### Recent

Contains a list of the dashboards that you have recently viewed, created, or updated. Note that these dashboards display in the first row of this section. Click the **More** Dashboards link to access additional dashboards that you recently created and updated. All other recently created or updated objects display below the dashboard row.

The links that are included with an individual object (for example, Edit and Properties) are displayed based on the object's type and your permissions for that object. For example, if you can view but not edit a dashboard, only the Open link will display with the dashboard. If a dashboard that you created displays in this section, then the Open and Edit links display with the dashboard. Click the More link to access a list of more dashboard options, such as Properties.

## **Most Popular**

Contains the objects that are accessed the most often by you and the users assigned to the groups to which you belong.

The links that are included with an individual object are displayed based on the object type and your permissions for that object. For more information about how Oracle BI EE determines the object's links, see the **Recent** component in this topic.

## Image Map Prompt Properties dialog

Use this dialog to specify information for the map column. For more information, see "Creating or Editing an Image Prompt" and "Other Prompt Types".

## Components

## Caption

Use this field to enter a caption for the image map prompt. The caption will display as the prompt's field label. For example, "Click a region to see sales data." You can include HTML markup tags in the caption, such as <b>, <font>, and .

## Description

Use this field to enter a description that will be saved with the prompt. Descriptions are displayed when administrators use the Catalog Manager.

## Image URL

Use this field to specify the location of the image file.

The image file must reside on a web server. Oracle recommends that you put the image files in the directory that contains all Web resource files (for example, app\res\region3.jpg). Placing the image files with the Web resource files prevents a security warning message from displaying when the user accesses the image from the dashboard or analysis

However, if you are using a Web server, such as WebServices, where the resource files are located in the deploy directory, then you must put the image file in the deploy directory and the directory that contains all Web resource files.

You can reference variables in this field. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

#### HTML

Use this field to specify the HTML <map> tags. In the map tags, you indicate the map region's shape, X and Y coordinates, and region name.

## **Extract Image Map from HTML**

Use this link to extract the values that you specified in the HTML <map> tags and put them in a table where you can link the regions to data columns and values.

## Import Background Maps dialog

Use this dialog to import maps to the Background Maps tab of the "Administration: Manage Map Data page".

The functions of the Administration page are described in Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

This dialog is also displayed as:

Add Layers dialog Import Images dialog Import Layers dialog

## Components

#### Look in

Use this box to select the connection to a data source in MapViewer that contains the predefined background maps, layers, or images from which you want to select. Each data source can contain a set of background maps, layers, and images. The sets are not related to each other. (In MapViewer, background maps are referred to as "tiles.")

The list of connections includes all those that have been defined during the configuration of Map Viewer. This box is not available for the Add Layers dialog.

#### List

Use this list to select one or more background maps, layers, or images, depending on which dialog is displayed.

## **Initiative Linkage dialog**

Use this dialog to specify how strongly an initiative drives an objective or how strongly an objective is driven by an initiative.

For more information, see:

"Related Items pane"

This dialog also displays as:

Objective Linkage dialog

## Components

#### Initiative

Displays the name of the initiative that drives the objective.

## Objective

Displays the name of the objective that is driven by the initiative.

## Strength

Use this box to specify whether the strength of the relationship between the objective and initiative is **Strong**, **Moderate**, or **Weak**.

For example, an initiative called "Upgrade Out Of Date Software" might moderately drive an objective called "Improved Employee Productivity".

#### **Proportionality**

Use this box to specify whether changes in performance or value in one object are directly proportional (Direct) or inversely proportional (Inverse) to changes in performance or value in the other object.

For example, in a relationship between an objective named Reduce Customer Complaints to 4% and an initiative named Improve Quality Control, the proportionality would be inverse because improvements in quality control should result in lower numbers of customer complaints.

## Initiatives pane

Use this pane to create, modify, and delete initiatives.

For more information, see:

- "What Are Initiatives?"
- "Creating Initiatives"

This pane is part of the "Scorecard editor".

## Components

#### **Initiatives Tree**

Displays the initiatives that have been defined for the scorecard and the KPIs that measure their progress hierarchically. It also shows the statuses of initiatives and KPIs using the appropriate colors and symbols that you specified for assessment mappings. For more information on assessment mappings, see "Defining Assessment Mappings for Scorecards".

#### **Toolbar**

This toolbar contains the following buttons:

- **Create Initiative** Use this button to display the "Scorecard editor: Initiative Details tab", where you create a new initiative as a child of the selected initiative.
- Open Use this button to open the selected object for editing or viewing, depending on the current mode.
- **Delete** Use this button to delete the selected object, if you have the appropriate permission.

### Right-Click Menu on an Object

Displays options for working with the object. The options vary depending on the object and whether Scorecard editor is in edit or read-only mode:

- **Open** Use this option to display the object for editing or viewing, depending on the current mode.
- **Create Initiative** Use this option to display the "Scorecard editor: Initiative Details tab", where you create a new initiative as a child of the selected initiative.
- **Delete** Use this option to delete the selected object, if you have the appropriate permission.
- **Analyze** This option is available only when you select a KPI. Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

**Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis may not persist after your Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Create Agent** This option is available only when you select a KPI. Use this option to display the "Create New Agent dialog", where you create an agent from the KPI.
- **Contact Owner** Use this option to display the "Contact Owner dialog", where you can contact the business owner of the object.

## **Insert Filter dialog**

Use this dialog to add a SQL FILTER function to a column formula in the "Edit Column Formula dialog: Column Formula tab".

For more information, see:

"Editing the Formula for a Column"

## Components

#### Filter Function Area

Displays the SQL function in the form:

FILTER(*expr* USING filter\_expressions)

#### Where:

- expr is an expression that contains at least one measure column. For example, the expression "sales + 1" is allowed if "sales" is a measure column. The expression "productid" is not allowed if "productid" is a scalar attribute.
- filter\_expressions is a Boolean expression (evaluates to TRUE or FALSE) and does not contain any measure columns. Also, this expression cannot contain any nested queries.

**Note:** If you selected some text in the **Formula** area before clicking **Filter**, then it is incorporated in the inserted SQL function, replacing the expression token (**expr**). For example, if you had selected "Sales Measures". Dollars before clicking **Filter**, then the SQL function would look like this: FILTER("Sales Measures". "Dollars" USING filter\_ expressions).

A complex filter statement might replace the filter\_expressions token as follows:

```
FILTER("Sales Measures".Dollars USING
((Periods. "Year" = '1999') AND ((Markets. District =
'CINCINNATI DISTRICT") OR (Markets.District =
'DENVER DISTRICT'))))
```

Use this area to define **filter\_expressions** by adding a single filter expression or building a complex filter statement using multiple filter expressions.

For each filter expression that you want to add, select a column from the Subject Areas pane. The "New Filter dialog" is displayed where you create the filter to add to the filter expression.

As you define the **filter\_expressions**, you can use the following:

- Operator to toggle between AND and OR to specify the relationship between multiple filter expressions.
- Filter item toolbar to manage a filter expression. The filter item toolbar is the collection of buttons that displays when you mouse over a filter expression. It includes the following buttons:

- Edit Filter Use this button to display the "Edit Filter dialog", where you edit the filter expression's criteria.
- **Copy Filter** Use this button to copy the filter expression. When you click this button, a copy of the filter expression is displayed below the original filter expression.
- **Delete** Use this button to delete the filter expression.

## **Subject Areas**

Use the "Subject Areas pane" to select columns to add to the filter expression.

Use the "Catalog pane" to select filters from the catalog to add to the filter expression.

## **Insert Function dialog**

Use this dialog to select a function to add to a formula in the "Edit Column Formula dialog: Column Formula tab".

For more information, see:

- "Editing the Formula for a Column"
- "How Are KPIs Evaluated?"
- Appendix A, "Logical SQL Reference"

## Components

#### **Functions**

Use this tree to select a function to add to a formula. Expand a function group to show a list of functions within that group.

#### Selected

Displays the name of the function that is currently selected in the Functions tree.

## **Syntax**

Displays the syntax of the function that is currently selected in the Functions tree.

#### Where

Displays descriptions of the arguments for the syntax.

#### Example

Displays an example of the function.

#### **Description**

Displays a description of the function that is currently selected in the Functions tree.

## **Notes**

- When you click the f(...) button in the Edit Column Formula: Column Formula dialog (or the Edit Formula dialog), if:
  - Some text is selected in the **Formula** area, then the selected text is incorporated into the inserted function formula when you click **OK**.
  - If no text is selected in the **Formula** area, then the function's expression is inserted and the first argument (denoted by tokens expr or expr1) is automatically selected when you click **OK**.

## **Insert Variable dialog**

Use this dialog to add a variable (either session, repository, or presentation) to a formula in the "Edit Column Formula dialog: Column Formula tab" or in the "New EVALUATE\_PREDICATE Function dialog".

For more information, see:

- "Editing the Formula for a Column"
- "How Are KPIs Evaluated?"
- "How Can I Use the EVALUATE\_PREDICATE Function with a Filter?"
- "Adding the EVALUATE\_PREDICATE Function to an Inline Filter"

## Components

#### Variable Name

This field is available only if you have selected **Session** and **Repository** as the variable type that you want to add.

Use this field to enter the name of the session or repository variable, for example USER.

## Variable Expression

This field is available only if you have selected **Presentation** as the variable type that you want to add.

Use this field to enter the name of the presentation variable, for example MyFavoriteRegion.

To type-cast (that is, convert) the variable to a string, enclose the name in single quotes, for example:

'user.displayName'

## **Default Value (Optional)**

This field is available only if you have selected **Presentation** as the variable type that you want to add.

Use this field to enter a default value for the presentation variable, for example EASTERN REGION.

#### **Notes**

When you click **OK** in this dialog, the appropriate expression for the variable is created and inserted in the Formula area. For example:

@{MyFavoriteRegion}{EASTERN REGION}

## Related Topics

"Using Variables"

# **Invoke Action dialog**

Use this dialog to provide values for action parameters and to run an action.

For more information, see:

- "What Are Actions?"
- "About Running Actions Using Action Links and Action Link Menus in Analyses and Dashboards"
- "Running Actions Associated with Action Links in Analyses and Dashboards"

## **Key Resource dialog**

Use this dialog to identify a user who is a key resource on an initiative.

For more information, see:

- "Collaboration pane"
- "What Are Initiatives?"
- "Creating Initiatives"

## Components

#### User

Displays the name of a user who is a key resource on the initiative. Click the **Set User** button to display the "Select Key Resource User dialog", where you search for and select the user.

## Capacity

Use this field to enter the percentage of full time hours the user will devote to this initiative, for example, 80%.

## **KPI** editor

Use this editor to create and modify KPIs that monitor your company's performance and goals. The KPIs that you create define performance targets and evaluate the performance of objectives and initiatives.

For more information, see:

- "What Are KPIs?"
- "How Can I Use KPIs?"

This editor is also displayed as:

Scorecard editor: KPI tab

## Components

## **General Properties**

Use the "KPI editor: General Properties page" to enter the business owner, the actual value, the target value, and to turn on trending to compare KPI values with those from a previous period.

## **Dimensionality**

Use the "KPI editor: Dimensionality page" to specify dimensions that determine how Oracle BI EE aggregates data in the KPI.

#### **Thresholds**

Use the "KPI editor: Thresholds page" to specify the performance thresholds and range of values that determine how KPI performance is evaluated and represented. Also use this page to create action links for the KPI.

## **Related documents**

Use the "KPI editor: Related Documents page" to attach any relevant document or business intelligence object stored in the Oracle BI Presentation Catalog.

## Related Topics

"Creating or Editing KPI Watchlists"

"Scorecard editor"

## **KPI editor: Dimensionality page**

Use this page of the "KPI editor" to add or remove KPI dimensions. This page also allows you to pin a value to a dimension.

Dimensions are based on attribute columns and hierarchical columns and determine how Oracle BI EE aggregates data in the KPI. For example, if you are creating a KPI for product sales, you could add dimensions that allow the user to view sales by both a specific region and a specific year.

Note that almost all KPIs should include a Time dimension, except constants or metrics defined only to be current snapshots like "Inventory On Hand" or "Current Phone Support Wait Time." It is not necessary to pin the time dimension to a specific value. It is a best practice to leave Time unpinned within the KPI definition. For more information, see the below description for the Value field. An unpinned Time dimension allows a dashboard or scorecard user to select the time period to display and enables the creation of trend and historical charts or tables.

For more information, see "What Are Dimensions and Pinned Dimension Values?"

This page is also displayed as:

Scorecard editor: KPI tab

## Components

#### Name

Displays the column name that you chose for the dimension. To add a dimension to the KPI, click the **Add** button.

#### Value

Use the down arrow to browse or search for and choose a value to pin to the dimension. When a user views the KPI, the pinned value aggregates the KPI. Select **Not Pinned** to do one of the following:

- Allow the watchlist or scorecard designer to pin the dimension values when adding the KPI to a watchlist or scorecard.
- Provide the user with a field to select the dimension's value from the point of view area in the watchlist, scorecard, or dashboard.

Note that when the designer pins a dimension value, that value cannot be changed when a user adds the KPI to a watchlist or scorecard. Only the designer or user with the appropriate permissions can access the KPI editor to modify a dimension's pinned

Oracle suggests that you create KPIs that are not pinned in their initial definition. Such KPIs are more flexible, reusable, and prevent you from creating and managing many over-specific KPIs. Suppose you create a Sales KPI without pinned region or time dimension values. You can then specify usages of the same KPI definition by pinning different region and time dimension values within scorecards, scorecard views, KPI watchlist rows, or dashboards.

#### Add

Use to access the KPI's subject area where you can select another attribute or hierarchical column as a dimension.

#### Remove

Use to delete the highlighted dimension from the KPI.

## **Related Topics**

"Creating or Editing KPIs" "KPI editor: General Properties page" "KPI editor: Thresholds page" "KPI editor: Related Documents page" "Select Values dialog" "Scorecard editor"

## **KPI** editor: General Properties page

Use this page of the "KPI editor" to specify the actual value (collected or calculated value) and the target value (desired value) of the KPI. You can enter, insert, or calculate these values.

Also use this tab to assign the business owner responsible for the KPI and specify if the KPI should support trending. Trending allows you to compare previous values to current values. For example, you can compare your December 2008 sales to the current year's sales.

To analyze KPIs by multiple dimensions (for example, Product, Geography, and Time), ensure that the data you use to calculate actual and target values is also dimensioned by Product, Geography, and Time.

For more information, see "How Are KPIs Evaluated?"

This page is also displayed as:

Scorecard editor: KPI tab

## Components

#### **Business Owner**

Use this field to view and select the userID of the person responsible for the business performance of the KPI. Business owners have the ability to override the KPI's statuses.

Click the **Set User** button to search for and select a business owner.

#### **Set User**

Use this button to open the "Select Business Owner dialog", where you can search for the person whom you want to assign as the KPI's business owner.

#### **Actual Value**

Use this field to specify a value to compare to the target value. Consider the following options:

- Click the down-arrow button to access the subject area list and select a measure or a column that contains a measure-based formula. For example, "Sales Measures"."Dollars".
- Place the cursor in the field and enter the actual value.
- Click **Edit Actual Value Formula** to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the actual value. For example, ((Sales - Cost)/Sales) \* 100.

#### **Target Value**

Use this field to specify the value that you want the KPI to achieve. The target value is a quantifiable goal for each measure. Consider the following options:

- Click the down-arrow button to access the subject area list and select a measure or a column that contains a measure-based formula. For example, "Sales Measures"."Dollars".
- Place the cursor in the field and enter the actual value.

Click **Edit Target Value Formula** to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the actual value. For example, ((Sales - Cost)/Sales) \* 100.

#### **Down Arrow**

Use this button to access the subject area list. From this list you can browse for and select a column for the value.

#### **Edit Value Formula**

Use this button to access the "Edit Column Formula dialog: Column Formula tab" to create a formula that calculates the value.

## **Enable Trending**

Use this option to indicate the direction in which change occurs (up or down), the extent of the change (as a value and percentage), and if the change indicates an increase or decrease in performance. If trending is enabled, users will see a trend icon on nodes in Scorecard diagrams, in KPI watchlists, and in other tables within Scorecard that reference this KPI. Users will also see a history chart on the KPI Details and KPI Overview tabs in Scorecard.

To use trending, ensure a time dimension is defined in the subject area.

#### **Data Format**

Displays an example of how the numeric data displays in the KPI. Click **Edit** to access the dialog where you specify the data format settings for the KPI.

## **Compare to Prior**

Use this option to select the period of time that you want to use for trend analysis. The period that you select determines the time periods displayed in history charts on the KPI Details tab and KPI Overview tab in Scorecard.

For example, to compare Units Shipped quarterly, select "Fiscal Time". "Quarterly". In this example, the KPI trends upward, downward, or unchanged based on the KPI values from one quarter to the next. Any KPI change values are computed using "Quarterly" as the period of analysis.

#### **Tolerance**

Use this field to enter the tolerance value for the trend. This field allows you to prevent reporting non-significant trends, such as expenses being over-budget by \$100.

The tolerance value that you enter must be a literal and can be expressed either as a percentage or absolute value (for example, 5,000 or 5%). The tolerance level must be met before the KPI displays the performance as improving or worsening.

## **Tolerance Down Arrow**

Use this field to specify how to measure tolerance value that you entered in the Tolerance field. Choose % Change to measure it by percent or Change to measure tolerance by the actual value.

## **Related Topics**

"Creating or Editing KPIs"

"KPI editor: Dimensionality page"

"KPI editor: Thresholds page"

"KPI editor: Related Documents page"

"Scorecard editor"

## **KPI editor: Related Documents page**

Use this page of the "KPI editor" to view and add links to business intelligence objects or web pages that provide additional information about or can be used in conjunction with the KPI. After you add related documents to a KPI, the related documents display in the "KPI editor: Related Documents page" and on the "Scorecard editor: KPI Details tab".

This page is also displayed as:

Scorecard editor: KPI tab

## Components

#### Name

Displays the link to the related item. Click this link to access the related document, or click Edit to modify the link.

#### Location

Displays the location of the related item. The location is either a location within the catalog or a URL to a location outside of the catalog.

## Type

Displays the type of item. "Catalog" displays if the item is located in the catalog, or "Web" displays if the item is located outside of the catalog.

#### Add

Use to access the "Add a Related Document dialog" to add an item to the Related Documents table.

### Remove

Use to remove the highlighted row from the Related Documents table.

## **Related Topics**

"Creating or Editing KPIs"

"KPI editor: General Properties page" "KPI editor: Dimensionality page"

"KPI editor: Thresholds page"

"Scorecard editor"

## **KPI** editor: Thresholds page

Use this page of the "KPI editor" to indicate if high, low, or target KPI values are desirable, specify the ranges and status symbols that gauge and represent KPI performance, and create or assign action links that the user can click to initiate a predefined process based on KPI status.

KPI status is determined by comparing the actual value against the target value and then placing the result in a corresponding range that defines levels of performance status (for example, good, warning, or critical).

This page is also displayed as:

Scorecard editor: KPI tab

For information about the Scorecard editor, see "Scorecard editor".

## Components

#### Goal

Use this list to specify if high, low, or closer to target values indicate the KPI's performance goal.

For example, select High values are desirable for a Customer References KPI or Low **values are desirable** for an Unresolved Support Calls KPI.

#### **Threshold**

Use this field to identify the values that indicate performance levels. For example, to indicate that sales below 120 indicate critical performance but that sales above 120 reflect acceptable performance, enter 120 in the field that corresponds to the critical status.

You can use the following as thresholds:

- The Actual Value or Target Value that you specified for the KPI.
- Values that you enter.
- Values calculated by a formula that you define in the "Edit Column Formula dialog: Column Formula tab". To define a formula, click the Edit Formula button.
- Variables. See "Edit Column Formula dialog: Column Formula tab". For more information on variables, see "Using Variables".
- Measures representing other business metrics from the subject area.

#### **Edit Formula**

Use this button to define threshold values by building a formula on the "Edit Column Formula dialog: Column Formula tab".

#### Add or Remove Threshold

Use this button to remove the corresponding threshold, or to add another threshold above or below it.

#### Status

Use this field to modify the default name of the performance level.

## Select icon to display for this status

Use this button to access the "Graphics dialog" where you can select an icon to represent the corresponding status.

## Select the text color to display for this status

Use this button to access the "Color Selector dialog" where you can select a text color to represent the corresponding status.

#### **Action Links**

Use this button to display the "Action Links dialog" wherever the KPI displays, such as on strategy nodes, initiatives, KPI Watchlist, or on the scorecard views on dashboards. This dialog specifies the processes or operations to be performed or invoked if the status of a KPI corresponds to a specific performance state. Action links display from the right-mouse click wherever the KPI displays, such as on initiatives or a KPI Watchlist.

For example, if a KPI for quarterly revenue is less than a particular amount, an action is triggered that automatically schedules a mandatory meeting of sales directors and managers.

## **Show Advanced Properties**

Use this option to specify whether to display the assessment scores to which each KPI status is mapped.

#### **Assessment Score**

Displays the assessment scores to which each KPI status is mapped. For example, a KPI with 3 statuses displays assessment scores of 100, 50, and 0 by default. These scores are used in Scorecard to determine the scores of objectives and initiatives. For more on scoring in Scorecard, see "Understanding Initiative or Objective Performance Assessment"

## **Related Topics**

"Creating or Editing KPIs"

"KPI editor: General Properties page"

"KPI editor: Dimensionality page"

"KPI editor: Related Documents page"

"Scorecard editor"

## **KPI Watchlist editor**

Use this editor to create a KPI watchlist.

This editor is also displayed as:

Scorecard editor: KPI Watchlist tab

For more information, see:

- "Scorecard editor"
- "What Are KPI Watchlists?"
- "Creating or Editing KPI Watchlists"

## Components

#### **Performance**

Use the "KPI Watchlist editor: Performance tab" to build the watchlist by dragging and dropping KPIs from the catalog pane to the KPI Watchlist. The KPI watchlist displays the KPIs' performance levels and other KPI data.

### **Details**

Use the "KPI Watchlist editor: Details tab" tab to supply a description of the KPI watchlist, specify a business owner, and attach any necessary related documents.

#### **Toolbar**

This toolbar contains the following buttons:

- **Save** Use this button to save the watchlist in the default location.
- Save As Use this button to name and save the watchlist to another location.
- Contact Owner Use this button to display the "Contact Owner dialog", which you can use to quickly contact the watchlist's business owner.

# **KPI Watchlist editor: Details tab**

Use this tab of the "KPI Watchlist editor" to specify supporting information for the KPI watchlist.

For more information, see:

- "What Are KPI Watchlists?"
- "Creating or Editing KPI Watchlists"

## Components

### **KPI Watchlist Name**

Displays the name of the KPI watchlist.

## **Description**

Use this field to enter a description of the KPI watchlist.

### **Business Owner**

Displays the userID of the person responsible for managing the KPI watchlist. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

### **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the KPI watchlist.

## **KPI Watchlist editor: Performance tab**

Use this tab of the "KPI Watchlist editor" to add KPI instances to the watchlist. When you add a KPI to the watchlist, you add an instance of the KPI. You can then assign default dimension values to the KPI's instance. From this tab you can also modify the KPI stored in the catalog, or view the KPI instance as an analysis.

## Components

### **KPI Watchlist**

Use this table to add KPIs to and manage KPIs in the watchlist.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

## **Related Topics**

"KPI Watchlist editor: Details tab"

# Layout pane

Use this pane to specify the layout of data in data views (graphs, gauges, funnel graphs, pivot tables, and tables).

For more information, see:

"Modifying the Layout of Data in Views"

This pane is part of the following editors:

- "Results tab: Graph editor"
- "Results tab: Funnel editor"
- "Results tab: Gauge editor"
- "Results tab: Pivot Table editor"
- "Results tab: Table editor"

## Components Common to All Data Views

**Note:** This section describes the components that are common to all data views. Additional components are available in the Table and Pivot Table editors (see "Additional Components Common to the Table and Pivot Table Editors") and in the Graph, Funnel, and Gauges editors (see "Additional Components Common to the Graph, Funnel, and Gauge Editors").

### **Drop Targets**

Use drop targets to modify the way that data is arranged in a view. By dragging columns from one drop target and dropping them in another, you can rearrange the data to suit your needs.

The drop targets that are displayed in this pane depend on the type of view. For more information, see "Understanding Drop Targets".

### **Properties**

Use this button to display the Properties dialog for a drop target. For example, if you click the button beside the Sections drop target, then the "Section Properties dialog" is displayed. If you click the button beside the view type name for tables and pivot tables, then the Properties dialog for that type of view is displayed.

## Additional Components Common to the Graph, Funnel, and Gauge Editors

### Display as Slider

Use this box to specify whether the members of the columns dropped in the Sections drop target are to be displayed as a section slider rather than as unique views. Select this box to display the members as a section slider. Deselect this box to display the each member as a unique view. For more information on section sliders, see "Defining Section Sliders in Graphs and Gauges".

### Use unified scale

This box is available only for line bar graphs.

Use this box to specify whether to display the lines and bars using the same scale or two separate scales, one for the lines and one for the bars.

Select this box to use one scale for both the lines and bars. The measure column that has the higher values is used for the scale.

Deselect this box to use two scales.

## Show In Legend

Use this box to specify whether a legend is to be displayed to show the color variation of the columns dropped in the Vary Color By (Horizontal Axis) drop target.

## Additional Components Common to the Table and Pivot Table Editors

### **Totals**

Use this button to add a grand total for that drop target for the entire view for attribute columns and hierarchical columns and to display the following options:

- **None** Use this option to exclude totals.
- **Before** Use this option to include totals before the data items. For example, if you add a total on a row that contains regions and select **Before**, the total is shown before individual districts in the region are listed. (For pivot tables only.)
- **After** Use this option to include totals after the data items. (For pivot tables only.)
- **At the Beginning** Use this option to stack all the totals at the top of the view. (For pivot tables only.)
- **At the End** Use this option to stack all the totals at the bottom of the view (For pivot tables only.)
- **Labels Only (no totals)** Use this option to display labels for totals, but not the total values. (For pivot tables only.)
- Format Labels Use this option to display the "Edit Format dialog" where you specify the custom text to insert into a totals heading using the Caption field and where you format the labels.
- Format Values Use this option to display the "Edit Format dialog" where you specify the formatting of the totals values.

### **More Options**

Use this button to display the following options:

- Format Headings Use this option to display the "Edit Format dialog", where you apply cosmetic formatting to the headings.
  - For more information about the cosmetic formatting that you can apply to headings, see "What is Cosmetic Formatting?"
- Format Values Use this option to display the "Edit Format dialog", where you apply cosmetic formatting to the values.
- **Hidden** Use this option to hide the column from the output, or, for the Measure Labels element in a pivot table, to hide the measure labels. For more information on the Measure Labels element, see "Understanding Drop Targets".
  - Hidden columns do not affect the aggregation of the values.

**Show Data As** — Use this option to display a measure as either an actual or a relative value. You can display the relative value of the measure, compared to the total, without the need to explicitly create a calculated item for it.

For more information, see "Displaying Relative Values for Measure Columns in Pivot Tables".

**Note:** The **Show Data As** options is available only for items that are stored or calculated measures.

Select one of the following options:

- **Values** Use this option to display the actual values of the measure column.
- **Percent of** Use this option to convert a stored or calculated measure into a percent of one of the following:
  - **Column** Shows the percentage of the column that the value constitutes.
  - **Row** Shows the percentage of the row that the value constitutes.
  - **Section** Shows the percentage of the section that the value constitutes.
  - **Page** Shows the percentage of the page that the value constitutes.
  - **Column Parent** Shows the percentage of the column parent that the value constitutes.
  - **Row Parent** Shows the percentage of the row parent that the value constitutes.
  - **Layer** Displays a menu from which you select the column in the view from which you obtain the percentage that the value constitutes.

**Note:** The number of decimal places is dependent upon the type of measure.

- **Index of** Use this option to convert a stored or calculated measure into an index value of one of the same options that are available for **Percent of**. For example, Column shows the index value of the column that this value constitutes.
- **Aggregation Rule** Use this option to override the default aggregation rule for a measure in tables and pivot tables by selecting the aggregation rule to apply, as described in "Aggregation Rules and Functions". For attribute columns, ensure that **Report-Based Total** is selected. This option is not available for the Prompts or Sections drop targets.
- **Display as Running Sum** Use this option to display numeric measures as running sums, where each consecutive cell for the measure displays the total of all previous cells for that measure. This option is a display feature only that has no effect on actual pivot table results.
  - For more information, see "Displaying Running Sums for Measure Columns in Pivot Tables".
- **Duplicate Layer** Use this option to duplicate a column. You create a duplicate that applies only to this view. The duplicate does not retain filters, selection steps, or formatting that were applied to the original.

- Remove Column or Remove Duplicate Use this option to remove the item on which you have clicked, such as a column or duplicated item. The column is removed from this view and all other views for the analysis. The duplicate is removed from this view only.
- Place Value in New Row Use this option to display section values on different rows. Where section values are displayed together in a row, you can specify that a section value is displayed on a new row.
- **Hide Repeated Values** —Use this option to display column values for a section once and hide repeated values until the values change. When the section column value changes, it is displayed indented to the right to show the hierarchical structure.
- **Format Measure Label** This option is available only for the Measure Labels element in a pivot table. Use this option to display the "Edit Format dialog", where you apply cosmetic formatting to measure labels. For more information on the Measure Labels element, see "Understanding Drop Targets".

# Aggregation Rules and Functions

The following list describes the aggregation rules that are available for measure columns in the "Layout pane" and for columns in the "Edit Column Formula dialog: Column Formula tab". The list also includes functions that you can use when creating a calculated item.

- **Default** Applies the default aggregation rule as in the Oracle BI repository or by the original author of the analysis. Not available for calculated items.
- **Server Determined** Applies the aggregation rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository). The aggregation is performed within Presentation Services for simple rules such as Sum, Min, and Max. Not available for measure columns in the Layout pane or for calculated items.
- Sum Calculates the sum obtained by adding up all values in the result set. Use this for items that have numeric values.
- Min Calculates the minimum value (lowest numeric value) of the rows in the result set. Use this for items that have numeric values.
- Max Calculates the maximum value (highest numeric value) of the rows in the result set. Use this for items that have numeric values.
- **Average** Calculates the average (mean) value of an item in the result set. Use this for items that have numeric values. Averages on tables and pivot tables are rounded to the nearest whole number.
- First In the result set, selects the first occurrence of the item for measures. For calculated items, selects the first member according to the display in the Selected list. Not available in the Edit Column Formula dialog.
- Last In the result set, selects the last occurrence of the item. For calculated items, selects the last member according to the display in the Selected list. Not available in the Edit Column Formula dialog.
- **Count** Calculates the number of rows in the result set that have a nonnull value for the item. The item is typically a column name, in which case the number of rows with nonnull values for that column are returned.
- **Count Distinct** Adds distinct processing to the Count function. This means that each distinct occurrence of the item is counted only once.
- **None** Applies no aggregation. Not available for calculated items.
- **Server Complex Aggregate** Applies the aggregation rule that is determined by the Oracle BI Server (such as the rule that is defined in the Oracle BI repository). The aggregation is performed by the Oracle BI Server, rather than within Presentation Services. Not available for calculated items.
- **Report-Based Total (when applicable)** If not selected, specifies that the Oracle BI Server should calculate the total based on the entire result set, before applying any filters to the measures. Not available in the Edit Column Formula dialog or for calculated items. Only available for attribute columns.

# Legend pane

Use this pane to view the legend for a cause & effect map or strategy map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"
- "What Are Strategy Maps?"
- "Creating Strategy Maps"

This pane is part of the "Cause & Effect Map tab: Diagram tab" or the "Strategy Map tab: Diagram tab".

## Components

## Legend

Displays and explains the symbols used on the cause and effect map or strategy map to indicate the proportionality. That is, whether changes in performance or value in the cause and effect relationship are directly proportional (direct) or inversely proportional (inverse) and strength (strong, moderate, or weak) of cause & effect relationships.

# Link or Image Properties dialog

Use this dialog to specify properties for a text link or image link that you are adding to a dashboard page.

For more information, see "Adding Content to Dashboards".

## Components

### Caption

Use this field to enter the text to display for the text link or image link.

Entering a caption for an image link is optional. If you do enter one, then you must also specify, in the Image Layout box, where the caption is to be displayed relative to the image.

### **Destination**

Use this field to specify what is to happen when the user clicks the text or image:

- To add text or an image only, without any links, leave the field empty.
- To specify that an analysis or dashboard should be displayed when the user clicks the link or image, specify the destination as Analysis or Dashboard, and click Browse to display the "Open dialog" where you select the analysis or dashboard.
- To specify that another action should occur, such as opening a Web site, document, or program, specify the destination as a URL and type the full path into the field that follows the Destination options.

A link is defined as any URL that the browser can interpret. URLs can point to Web sites, documents, images, FTP sites, newsgroups, and so on. Depending on the browser, the following are examples of valid URLs:

```
http://home.netscape.com/index.html
ftp://ftp.microsoft.com
news:news.announce.newusers
```

See Table B-3 for more information about the kinds of internal or external content to which you can link.

**Note:** Administrators should create a virtual directory on the Presentation server for shared documents called \DashboardFiles that maps to a shared network directory of the same name. This allows users with the appropriate permissions to publish files to this folder, and reference these files by their relative URL names rather than by their fully qualified network share names, for example, \DashboardFiles\AnnualReport.doc instead of \\SharedServer\CommonShare\DashboardFiles\AnnualReport.doc.

### **Target**

Use this box to specify whether the information is to be displayed in the **Current** Window or in a New Window for the browser.

For every action except sending mail and executing a program, you can control how the link should be displayed. Select the current window when you want the action to

occur in the display pane of the dashboard. This leaves the dashboard active but in the background. Choose a new window when you want the action to take place in a new browser window. This opens another instance of the browser.

### **Image**

Use this field to enter the location and name of the image to be displayed. Specify the location as a URL. These are examples:

```
http://imageserver/MyImage.gif
/DashboardFiles/image.gif
```

If the image is not on the local server, then the URL must include http://. If the image is for use in a shared environment, then ensure that the image is located on a network drive that is accessible to all users.

## **Image Layout**

Use this box to select where to display the image, such as to the right or left of the caption or above or below the caption, if you entered a caption.

### **Notes**

- You can reference variables in the **Caption**, **Destination** and **Image** fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".
- Table B–3 provides information about the kinds of internal or external content to which you can link:

Table B–3 Link Options for Adding a Text Link or Image Using the Dashboard Editor

| Link Option              | Comments  |
|--------------------------|---|
|                          | Comments  |
| Web site or document     | You need to locate the URL, or address, for the site or document. You can copy the destination address from the browser's address or location box, and then paste it.   |
|                          | For a Web site, you can omit the http:// portion of the address if the URL resides on the Web server, such as your intranet site.   |
|                          | If the URL resides on your company's Web server, then you can enter the relative address of the file. For example:  |
|                          | \DashboardFiles\Logo.gif  |
| Local or shared document | If the document is for use in a shared environment, then ensure that it is located on a network drive that is accessible to all users. Examples of the kinds of documents that you can open are spreadsheets that contains recent sales reports, a slide presentation that introduces a new product, a Microsoft Word document that contains your company's annual report, a graphic file that contains a map from the airport to your corporate headquarters, and so on. |
|                          | For example, if the document is for your use only, a sample location might be:  |
|                          | c:\mycomputer\reports\report.doc  |
|                          | For a shared document, specify the UNC name, for example:   |
|                          | \\ALLUSERS\reports\report.doc   |

Table B–3 (Cont.) Link Options for Adding a Text Link or Image Using the Dashboard

| Link Option                                 | Comments   |
|---|--|
| Send email to a specified user              | You need to know the mailto URL, for example:  |
|   | mailto:support@oracle.com  |
|   | When the user selects this link, the browser will launch the mail application with the To: field filled in. (The browser controls the launching of the mail program.)  |
| Execute a program                           | If the program is for use in a shared environment, then ensure that it is located on a network drive that is accessible to all users. You can use this feature to download and run an application. (The operating system controls the launching of the application.) |
|   | For example, if you want to launch Microsoft Word for your use only, a sample location might be:   |
|   | c:\MSOFFICE\OFFICE\winword.exe   |
|   | For a multiuser-licensed program on a shared drive, specify the UNC name for the location, for example:  |
|   | \\ALLUSERS\SOFTWARE\MSOFFICE\OFFICE\WORD\winword.exe   |
| Refresh your<br>browser using<br>JavaScript | Your browser needs to support JavaScript in order to use the following example.  |
|   | javascript:window.location.reload()  |
|   | In the Target area, choose the option Current Window.  |

# **Map Properties dialog**

Use this dialog to edit the properties of a map view, such as its size and the options that are available on the toolbar.

For more information, see "Editing Map Views".

## Components

### Canvas

Use the "Map Properties dialog: Canvas tab" to specify the size of the map.

### **Tools**

Use the "Map Properties dialog: Tools tab" to specify which tools are available for display with the map.

### Interaction

Use the "Map Properties dialog: Interaction tab" to specify whether to automatically create formats when drilling in a map.

### Labels

Use the "Map Properties dialog: Labels tab" to specify whether to show the labels for certain layers on the map view.

# Map Properties dialog: Canvas tab

Use this tab of the "Map Properties dialog" to specify the size of the map. For more information, see "Editing Map Views".

## Components

### **Canvas Size**

Use this box to specify the size of the map within its container. You can select either Default, Custom, or a predefined size. If you select Default or a predefined size, then no other options are available and the map is sized to fit its container. The container is whatever area is holding the map, such as the area in the Map editor or the section of a dashboard page.

### Width

Use this field to specify the width of the map in pixels.

## Height

Use this field to specify the height of the map in pixels.

# Map Properties dialog: Interaction tab

Use the Interaction tab and the Labels tab of the "Map Properties dialog" to do the following:

- Specify whether to automatically create formats when users drill in a map. This setting applies to the entire map view, rather than to specific formats.
- Specify whether to show the labels for certain layers on the map view.

The tab is also displayed as:

Map Properties dialog: Labels tab

For more information, see "Editing Map Views".

## Components

## Automatically create formats when drilling

Available on the Interaction tab. Use this box to specify whether to automatically create formats each time that you drill in a map. The formats that you create are listed in the Map Formats pane and are based on the formats that exist on the base drill layer. For example, if you have a Region color fill format and a Region pie graph format and you drill on that layer, then you automatically create a new color fill format and a new pie format with the drill action.

You can also specify this option in the Map Formats area of the Map View editor. The option is updated in both places when you make a change in either place.

### **Show Labels for Spatial Layers**

Available on the Labels tab. Use this box to specify whether to show labels for all layers or specific layers on the map view. The tab includes a box for each layer on the map view. The labels are displayed in the same order as that of the layers listed in the Map Formats area of the Map View editor. Custom point layers have labels hidden by default.

# Map Properties dialog: Tools tab

Use this tab of the "Map Properties dialog" to specify which tools are available for display with the map.

For more information, see "Editing Map Views".

## Components

### **Toolbar**

Use this box to specify the display of the following buttons on the toolbar:

- Pan Hand
- Zoom In, Zoom Out

## Overlay

Use this box to specify the display of the following options on top of the map:

- **Pan Buttons**
- **Zoom Slider**

### Information

Use this box to specify the display of the following options in the Information panel of the map:

- **Distance Indicator**
- **Map Overview**

## Mission tab: Details tab

Use this tab of the "Scorecard editor: Mission tab" and the "Scorecard editor: Vision tab" to specify supporting information for the mission or vision statement.

For more information, see:

- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Vision Statements?"
- "Defining Vision Statements"

The tab is also displayed as:

Vision tab: Details tab

## Components

### Name

Displays the name of the mission or vision statement.

## **Description**

Use this field to enter a description of the mission or vision statement.

### **Business Owner**

Displays the userID of the person responsible for managing the mission or vision statement. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

## **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the mission or vision statement.

# Mission tab: Document tab

Use this tab of the "Scorecard editor: Mission tab" and the "Scorecard editor: Vision tab" to enter and format your mission statement or vision statement.

For more information, see:

- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Vision Statements?"
- "Defining Vision Statements"

The tab is also displayed as:

Vision tab: Document tab

## Components

### **Toolbar**

This toolbar contains buttons (such as Bold, Increase Font Size) for formatting your mission or vision statement.

# My Account dialog

Use this dialog to specify your personal preferences, such as your locale, time zone, preferred currency, and delivery options for the delivery of alerts by agents. The options that display on this dialog depend upon your privileges.

**Note:** If the Delivery Devices and Deliver Profiles tabs already contain devices and profiles, then do not make any changes to these tabs without first consulting the administrator, as any changes you make will override the delivery device and profile information that was configured for you.

For more information, see:

- "Setting Preferences"
- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"

## Components

### **User ID**

Displays the user ID that is shown in the user interface.

### **Display Name**

Displays the name that is shown in the user interface.

### **Preferences**

Use the "My Account dialog: Preferences tab" to specify your account's display preferences.

### **BI Publisher Preferences**

Use the "My Account dialog: BI Publisher Preferences tab" to specify your Oracle BI Publisher preferences.

### **Delivery Options**

Use the "My Account dialog: Delivery Options tab" to configure your devices and profiles for the delivery of alerts.

### My Application Roles

Use the "My Account dialog: My Application Roles tab" to view a list of the roles to which you have been assigned by the administrator.

### Delegated Users

Use the "My Account Dialog: Delegated Users tab" to view a list of users who have been given the privileges to access your analyses and dashboards, if the administrator has configured this functionality.

# My Account dialog: BI Publisher Preferences tab

Use this tab of the "My Account dialog" to modify the Oracle Business Intelligence Publisher preferences.

For more information, see:

"Setting Preferences"

## Components

## **Report Locale**

Use this box to select a locale for reports. This locale can be different than the locale that you specified in the "My Account dialog: Preferences tab".

The reports that you view and create will use the locale that you specify here. The locale usually corresponds to the language that you specify in the User Interface Language field that you selected in the "My Account: Preferences tab" or the country from where you are working. For example, your specified language is English and your locale can be English - United States or English - Canada. The locale that you select determines the date and time formats, daylight saving time settings, and currency formats settings.

### **Report Time Zone**

Use this box to select the time zone that you want to apply when viewing or creating reports. This time zone can be different than the time zone that you specified in the "My Account: Preferences tab."

This option is useful if you do not reside in the same physical location as the default time zone that was set by the administrator, and you want to select another time zone.

# My Account Dialog: Delegated Users tab

Use this tab of the "My Account dialog" to view a list of users who can use the "Act As" functionality to access your analyses and dashboards. You cannot modify this list. This tab is available only if the administrator has configured this functionality.

Depending upon the privileges, users can inherit your user privileges, which allows them to change your default dashboard and modify your content and preferences, or they are granted restricted access to only view your analyses and dashboards. When users are granted restricted access, they maintain their own user privileges when accessing your business intelligence content.

For more information, see:

- "About Acting for Other Users"
- "Acting for Other Users"

# My Account dialog: Delivery Options tab

Use this tab of the "My Account dialog" to configure your delivery devices and delivery profiles. Your delivery devices, along with your delivery profiles, control how you will be reached when an alert is generated by an agent.

For more information, see:

- "What Are Devices and Delivery Profiles?"
- "Configuring Your Devices and Delivery Profiles"
- "What Are Agents?"
- "What Are Alerts?"

## Components

### Devices

Use this area to configure your delivery devices. To do so, in the first box, select the category of the device, either Email, Phone, Pager, Handheld, or Other), and then to:

Create a device, click the Create Device button to display the "Create Device dialog", where you create a device.

If you want a device to be the default device for the category, select the **Default** option in the **Default** column to the right of the device name.

**Note:** When the destinations specified for agents are specific devices, the default devices you specify here override the devices in your active delivery profile. For example, if an agent is defined to be delivered to e-mail devices, the default e-mail device you specify here will be used rather than any e-mail devices you specify in your active delivery profile. (The destinations for agents are specified on the "Agent editor: Destinations tab").

- Delete a device, select the device name and then click the **Delete Device** button.
- Edit a device, select the device name and then click the **Edit Device** button. The "Edit Device dialog" is displayed.

### **Delivery Profiles**

Use this area to configure your delivery profiles. Click the Create Delivery Profile button to display the "Create Delivery Profile dialog", where you create a delivery profile.

If you want a delivery profile to be your active profile, click the **Active** option in the **Active** column to the right of the profile name.

To delete a delivery profile, select the profile name and then click the **Delete Profile** button.

To edit a delivery profile, select the profile name and then click the **Edit Profile** button. The "Edit Delivery Profile dialog" is displayed.

# My Account dialog: My Application Roles tab

Use this tab of the "My Account dialog" to view a list of the application roles to which you are assigned. You cannot modify this list. See the administrator to be added to or removed from application roles.

An application role defines a set of permissions. Any user or group assigned to an application role is granted the permissions associated with that role. For example, you might belong to a role that allows you to view and not create business intelligence content.

# My Account dialog: Preferences tab

Use this tab of the "My Account dialog" to specify your account's display preferences. For more information, see:

"Setting Preferences"

## Components

### Starting Page

Use this box to select the dashboard that you want to display when you sign in to Oracle BI Enterprise Edition. Note the following options:

- **Default** Select this option to set your company's default dashboard, as specified by the administrator, as your default dashboard. In some cases, the administrator might require you to use only the company's default dashboard as the dashboard that displays when you sign into Oracle BI EE.
- **Home Page** Select this option to set the Home page as your default dashboard. You might select this option if creating objects or maintaining the catalog is your primary job responsibility.
- My Dashboard Select this option to set your My Dashboard that you have created and saved as your default dashboard.
- Saved Dashboards This list contains the names of all of the dashboards that have been created and saved to the catalog's dashboards subfolders (for example, Shared Folders then Marketing subfolder then Dashboards subfolder). You can set any of the dashboards that are displayed in this list as your default dashboard.

### Locale (location)

Use this box to select a locale. The locale usually corresponds to the language that you specify in the **User Interface Language** field or the country from where you are working. For example, your specified language is English and your locale can be English - United States or English - Canada.

The locale that you select determines the date and time formats, daylight saving time settings, and currency formats settings.

### **User Interface Language**

Use this box to select the language in which you want the Oracle BI EE interface to display. The language that you specify here persists, unless, for example, it is overridden for the session by the language that you specify in the "Sign In page". If your language is overridden, then the cause of the override displays in a second box within this field.

### **Time Zone**

Use this box to select the time zone that you want to apply when viewing content. This option is useful if you do not reside in the same physical location as the default time zone that was set by the administrator, and you want to select another time zone. For example, suppose that the Oracle BI Server that sends you alerts resides in the US Pacific time zone, but your work location is in the US Central time zone. After you set the Central time zone as your preferred time zone setting, the delivered time on your alerts is displayed in Central time.

Your account's time zone will automatically apply to any items that you create, modify, run, receive, and print. The date and time columns included in analyses are displayed according to the content designer. The content designer can force a specific time zone to be displayed in the column or can allow your default time zone to be displayed in the column. A clock button will display in the column heading, and when you hover over this button, the name of the time zone used in the column is displayed.

For more information on how the administrator sets the Oracle BI Server time zone, see Oracle Fusion Middleware Metadata Repository Builder's Guide for Oracle Business Intelligence Enterprise Edition.

### Currency

This box is available only if the administrator has configured the userpref\_ currencies.xml file as described in Oracle Fusion Middleware System Administrator's *Guide for Oracle Business Intelligence Enterprise Edition.* 

Use this box to select the currency in which to view currency columns in dashboards and analyses.

### This selection:

- Takes effect in your current session.
- Is saved to the catalog and remains in effect for all sessions until you again modify and save it.
- Applies to all currency columns that have been converted by the Oracle BI Server and for which the currency data format has been set (by the content designer) to use the user's preferred currency.

The administrator defines the currency options that are available in this box.

### **Accessibility Mode**

Use this option to select whether content for Oracle BI EE is rendered in a browser in a way that facilitates the use of a screen reader.

For information, see Appendix E, "Accessibility Features."

# **New Action Link dialog**

Use this dialog to create a new action link to add to an analysis.

For more information, see:

- "What Are Actions?"
- "What Are Action Links and Action Link Menus?"
- "Adding Actions to Analyses"

This dialog is also displayed as:

Edit Action Link dialog

## Components

### **Link Text**

Use this field to enter the text to display as the link to execute the associated action.

### Action

Displays the action to be associated with the action link.

### **Create New Action**

Use this button to select the type of action that you want to create. If you selected:

- Navigate to BI Content, first the "Select BI Content For Action dialog" is displayed, where you select the Oracle BI EE content to which to navigate, and then the "Create New Action dialog" is displayed.
- Invoke a Web Service, the "Select Web Service Operation dialog" is displayed, where you select a Web Service operation to be invoked, and then the Create New Action dialog is displayed.
- Invoke a Java Method, the "Select Java Method dialog" is displayed, where you select the Java method to be invoked, and then the Create New Action dialog is displayed.
- Any other action type, the Create New Action dialog is displayed.

### Select existing action

Use this button to display the "Open dialog", where you select an existing action to add to the analysis.

### **Edit Parameter Mapping**

This button is available only for named actions that have parameters that are not fixed or hidden.

Use this button to display the "Edit Parameter Mapping dialog", where you edit the action parameters.

### More (>>)

Displays these options:

**Edit Action** — Use this option to display the "Edit Action dialog", where you can edit the action.

- **Remove Action** Use this option to remove the action.
- Save Action As Use this option to display the "Save Action As dialog", where you can save the action to the catalog. If the action is an inline action, then the action is saved to the catalog rather than saved with the analysis. If the action is a named action, then you can save the action with the same name or another name.

### **Enable**

Use this box to specify one of the following options:

- **Always** Use to specify that the action link is always to be enabled.
- **Conditionally** This option is not available when you are adding an action link to a column heading. Use to specify that the action link is to be enabled only under certain conditions. Selecting this option displays the **Conditions** area.

For more information, see "About Conditionally Enabling Actions".

### **Conditions**

(Displayed only if the **Conditionally** option is selected.)

Use this area to create one or more conditions to be used to conditionally enable the action link.

To create a condition, you select either an attribute column or a hierarchical column on which to base it but with these restrictions:

- If you select an attribute column, you can add multiple conditions.
- If you select a hierarchical column, you can add only one condition.
- You cannot combine conditions based on attribute columns with a condition based on a hierarchical column and vice versa.

If you add multiple conditions, then each additional condition you add is combined with the previous condition using the AND operator. The AND operator means that the criteria specified in each condition must be met. This is the default method for combining conditions. You can change the AND operator to OR by clicking AND. The OR operator means that the criteria specified in at least one condition must be met.

Depending on how you construct the condition combinations with the AND and OR operators, some conditions might be grouped. Grouped conditions are bounded by boxes.

This area includes the following components:

- **New Condition** Use this button to first select the column on which to base the condition and then display the "New Condition dialog", where you can create a new condition.
- Edit Filter Use this option to display the "Edit Condition dialog", where you edit the condition.
- **Copy Filter** and **Paster Filter** Use these options to add a copy of the condition to the list of conditions. The copy is added below the condition that you copied with the AND operator between them.

You can then edit the copy of the condition. You can also change the operator to OR.

This option is useful to quickly add an additional condition to the list by modifying an existing one.

**Delete** — Use this button to delete the condition.

- **AND or OR** Use this button to toggle between the AND and OR operators.
- **Edit Filter Group** This button displays only for a group of conditions. Displays these options:
  - **Ungroup** Use this option to ungroup the group of conditions.
  - **Delete Group** Use this option to delete the group of conditions.
  - **Duplicate Group** Use this option to duplicate the group of conditions

# New Calculated Item dialog

Use this dialog to create or edit a calculated item or a group.

For more information, see "Working with Groups and Calculated Items".

This dialog is also displayed as:

Edit Calculated Item dialog Edit Group dialog New Group dialog

## Components

## **Display Label**

Use this field to specify the label for the calculated item or group when it is displayed in a view. This label can differ from the name under which the object is stored in the Oracle BI Presentation Catalog.

### Values From

Use this box to select an attribute column or hierarchical column, which is included in the analysis, whose values you want to use for the calculated item or group. This field is read-only if you displayed the dialog from the Layout pane or from a location in which a column was already selected.

### Function

Use this box to select the function for the calculated item. Many of the functions are those described in "Aggregation Rules and Functions".

In addition, you can select Custom Formula, which provides a toolbar with which you select mathematical operators to include in the function for the calculated item. You can also enter the following functions: Absolute, Ceiling, Floor, Round, Sqrt.

A formula creates a dynamic custom grouping within the view. All measures referenced in a formula must be from the same column and must be present in the results. Formulas can be inserted into, or combined with, other calculated items.

Instead of specifying a named item for attribute columns, you can specify \$n or \$-n, where n is an integer that indicates the item's row position. If you specify \$n, then the measure is taken from the nth row. If you specify \$-n, then the measure is taken from the nth to the last row.

### **Available**

Use this area to select members to move to the Selected List area. The "Catalog pane" is displayed so you can select members or groups from there. When you move a member to the Selected List area, it is displayed with a green check mark beside it in the Available List area.

Use this button to display the Search area of the "Select Values dialog", where you can locate members.

### Selected

Use this area to view the values that you have selected from the Available area and moved to the Selected area. If you selected Custom Formula, then use the toolbar of mathematical operators at the bottom to create the formula for this calculated item. Use the following operators:

- + Plus sign, for an addition operation in the formula.
- Minus sign, for a subtraction operation in the formula.
- \* Multiply sign, for a multiplication operation in the formula.
- / Divide By sign, for a division operation in the formula.
- % percent sign, for include a percent in the formula.
- \$ Dollar sign, for acting upon the row position of an item in the formula.
- (Open parenthesis, to signify the beginning of a group operation in the formula.
- ) Close parenthesis, to signify the ending of a group operation in the formula.

### **Format**

Use this button to display the "Edit Format dialog" where you format the calculated item or group. If you apply formatting in this dialog, this formatting is applied first, then conditional formatting is applied.

### **Hide Details**

Use this box to suppress the display of the members that you have included in the calculated item in the view. For example, suppose that you have a pivot table that is displaying Region on the row edge, and it is currently showing the values Eastern, Western, and Central. Suppose that you create a new calculated item called "Other Regions" that is the sum of Western + Central. If you select **Hide Details**, then only two members are shown in the pivot table: Eastern and Other Regions.

If you select this box for a custom formula, then an implicit remove selection step is created using the items from either the custom formula or from the Selected list.

### **Selection Steps**

Use this tab to see the steps that will be saved as a group, if you select the **Steps** button. This tab is available only if you are editing a group that you have previously saved as a list of selection steps.

### Results

Use this tab to see the members that have been specified by the selection steps.

### Steps (generate results dynamically at runtime)

Click this button to save the selection steps for a group. The results of the selection are refreshed at runtime.

### Results (generate results now and display every time)

Click this button to save a group as a list of members, rather than as a list of steps.

## Notes

To select multiple values, press the Ctrl key, then click the values.

- To select a range of values, click the first value in the range, press the Shift key, then click the last value in the range.
- To move one or more values from the Available List area to the Selected List area, use the Move or Move All button. You also can double-click a single value in the Available List area to move it to the Selected List area.

For a group, the following options are displayed when you click **Move**. These options are not available when you create a nested group.

- **Add** Use this option to add the group to the analysis. You will see an "Add: group-name" step in the Selected List area. You will see an outline value for the group in a table or pivot table.
- **Add Members** Use this option to add the members of the group to the analysis. You will see an "Add: Members of group-name" step in the Selected List area. You will not see an outline value in a table or pivot table; you will see the members of the group.
- To remove one or more values from the Selected List area, use the **Remove** or Remove All button. You also can double-click a single value in the Selected List area to remove it.

# **New Condition dialog**

Use this dialog to create or edit a condition.

For more information, see Chapter 9, "Working with Conditions."

This dialog is also displayed as:

Create Condition dialog Edit Condition dialog

## Components

### Create condition based on

Use this list to select whether the condition is to be based on an **Analysis** or **KPI**.

### **Browse**

Use this button to display one of the following dialogs, where you select the analysis or KPI on which to base the condition:

- For an analysis, the "Select Analysis dialog" is displayed.
- For a KPI, the "Select KPI dialog" is displayed.

### **Condition Data**

Displays the following:

- **Selected Analysis** If the condition is based on an analysis, then use this button to view the analysis.
- Information about the analysis or KPI on which the condition is based.

### **Parameters**

Displays the prompted filters associated with the analysis. (A prompted filter is a filter whose operator is set to **Is Prompted**.)

Click the Edit button adjacent to a prompted filter to display the "Edit Parameter Filter dialog", where you edit the filter.

### **Dimension Value area**

Displays the KPI dimensions whose values were set to Not Pinned in the KPI. Use the Value fields to specify values for these dimensions.

### **True If Row Count**

This area is available only if the condition is based on an analysis.

Use this area to specify the evaluation criteria as follows:

- Operator Use this box to select the operator to apply to the row count. Valid operators are:
  - is equal to Use to evaluate whether the number of rows in the analysis is equal to the number of rows specified
  - **is not equal to** Use to evaluate whether the number of rows in the analysis is not equal to the number of rows specified

- is less than Use to evaluate whether the number of rows in the analysis is less than the number of rows specified
- is greater than Use to evaluate whether the number of rows in the analysis is greater than the number of rows specified
- is less than or equal to Use to evaluate whether the number of rows in the analysis is less than or equal to the number of rows specified
- is greater than or equal to Use to evaluate whether the number of rows in the analysis is greater than or equal to the number of rows specified
- **is between** Use to evaluate whether the number of rows in the analysis is between the range of rows specified
- is not between Use to evaluate whether the number of rows in the analysis is not between the range of rows specified
- *Row Count* Use this box or boxes to specify the row count to be evaluated. For a range of rows, the start and end values that you specify are included in the range.

### Condition true if KPI

This area is available only if the condition is based on a KPI.

Use this box to specify the KPI status on which the condition is to be evaluated.

### Test

Use this button to test whether the condition evaluates to true or false. Displays the Test Condition dialog, which provides the results of the condition evaluation.

# **New Condition Step dialog**

Use this dialog to create a new condition step as part of working with selection steps.

For more information, see "Working with Selections of Data".

This dialog is also displayed as:

Edit Condition Step dialog

## Components

### Select Type

Use to select from a list of condition types for the specified dimension column. The following list describes the categories of condition steps that you can create. The components in this dialog differ slightly, depending on which type you select.

- Exception Conditions that select members using comparisons of values for measure columns. Sample conditions are "Sales > Cost" and "Sales <= Cost + 10%."
- Top/Bottom Conditions that select the specified number of members after ranking the members by the specified measure column. You can specify an exact number of members or a percentage of the total members. Sample conditions are "Top 10 based on Sales" and "Top 5% based on Cost."
- Match Conditions that select members based on matches with text strings and attribute values. A sample condition is "Name contains abc." You can use this condition only with columns that have a string data type.
- Time/Ordinal Conditions that select members based on ranges of time and on hierarchical levels. A sample condition is "From July 2000 to December 2000." Available only for columns with a data type that relates to time.

### Action

Use this box to select the type of action to create for the members that the condition step specifies. You can select to add the selected members to the selection, keep only the selected members and remove all others, or remove the selected members from the selection.

Use the box beside the action type to select the column for whose members you are creating the condition step.

## Operator

Use this area to select the operator, based on the type:

- For Exception, depends on the type. Sample values include Within, Not Within, Between, Greater than, and Equals.
- For Top/Bottom, whether the members have a ranking of top or bottom.
- For Time/Ordinal, either:
  - Whether to use the last or first number of time periods, using the value in the Number field.
  - Whether the members start with, end with, or come before or after the column value in the **Time Period** field.

For Match, whether the members contain, begin with, end with, or match the string in the **Text** field.

### Number

Enter the number of time periods, such as 3, when creating condition steps of type Time/Ordinal.

### **Time Period**

Select the column value on which to base the condition, when creating condition steps of type Time/Ordinal.

### Rank or Range

Enter the percentage to use for the rank or range, such as 5, when creating condition steps of type Exception or Top/Bottom.

### Value

Enter the value to use for the comparison, when creating condition steps of type Exception.

### Text

Enter the string to use for matching with the members, when creating condition steps of type Match. Select **Match Case** to provide case-sensitivity for the matching.

### Override with

Use this box to specify that an analysis prompt, a dashboard prompt, or a variable can override the values that you specify in this condition step. Depending on what you are overriding, you can override certain values with a prompt, a presentation variable, a session variable, or a repository variable.

If you select a variable type, then enter the name of the variable in the field. For example, suppose that you have a column called EMPLOYEE\_ID. You can specify USER as the session variable with which to override the value of that column. When a user logs in, the column value is set to his login name. For more information on variables, see "Using Variables".

In a list of steps for a column, specify that only one step in the list be able to be overridden by a prompt or presentation variable.

For information, see Chapter 6, "Prompting in Dashboards and Analyses."

### Measure

Use this list to select the name of the measure column whose data values you want to compare, when creating condition steps of type Exception or Top/Bottom.

### For

Use this area to qualify all of the dimensions of the analysis other than the dimension whose members you want to select, when creating condition steps of type Exception or Top/Bottom. For each dimension, you select which of its members to include. You can select specific members, or All, which specifies to aggregate the members when creating the condition. For example, suppose that you are qualifying the Region dimension. You can select a specific region, such as East, whose value is used in the condition. If you select All, then the values of all regions are aggregated and used in the condition.

You can use the **For** area to create a qualified data reference (QDR). A QDR is a qualifier that limits one or more of the dimensions to retrieve a single value for a measure column. A QDR is useful when you want to temporarily reference a measure column value without affecting the current status of the dimensions.

When you specify a QDR, you can specify multiple members for limiting the dimensions. When you specify multiple members, the measure column value is aggregated using the default aggregation from the Oracle BI Server. For example, suppose that you want to create a condition for displaying those Regions in which Units is greater than 100. Suppose that you create a QDR for the Year dimension that specifies 2000 and 2001 and that the default aggregation is Sum. If the values for 2000 and 2001 for the Central region are 50 and 60 respectively, then both those years are displayed, because their sum exceeds the 100 units that was indicated.

### Offset

Use this list to select either addition or subtraction, to enter the number and to specify whether the number is a percent, when creating certain condition steps of type Exception.

### Match in

Use this box to select the part of the member that you want to match when creating condition steps of type Match. Options include any label, member ID, long label, medium label, and short label.

### Note

To create a new step that is based on a hierarchy, use the "New Hierarchy Selection Step dialog".

# **New Dashboard dialog**

Use this dialog to specify the name, description, and location of the dashboard that you are creating.

For more information, see "Creating Dashboards".

## Components

### Name

Use this field to enter a name for the dashboard.

### Description

Use this field to enter a description for the dashboard.

### Location

Use this list to select a folder for the dashboard in the Oracle BI Presentation Catalog. If the folder you want is not in the list, click the **Browse Catalog** link (at the bottom of the list) to display the "Select Location dialog", where you can browse for the folder that you want.

If you choose a folder in which no dashboards have been saved, then a new "Dashboards" folder is automatically created in that folder in which to save the new dashboard. For example, if you choose folder named /Shared Folders/Sales in which no dashboards have been saved, a new Dashboards folder is automatically created and the Location entry changes to as /Shared Folders/Sales/Dashboards.

If you save the dashboard in the Dashboards subfolder directly under /Shared Folders/first level subfolder, the dashboard will be listed in the **Dashboard** menu in the global header. If you save it in a Dashboards subfolder at any other level (such as /Shared Folders/Sales/Eastern), it will not be listed.

### Content

Displays the following options:

- **Add Content Now** Select this option to add content to the new dashboard now. The new dashboard that contains one blank page is displayed in the "Dashboard builder" for editing.
- **Add Content Later** Select this option to add content to the new dashboard later. An an empty dashboard is created (but not displayed) to which you can add content later.

See "Editing Dashboards".

## New EVALUATE\_PREDICATE Function dialog

Use this dialog to create or edit the EVALUATE\_PREDICATE function's formula.

For more information, see:

- "How Can I Use the EVALUATE\_PREDICATE Function with a Filter?"
- "EVALUATE\_PREDICATE"

This dialog is also displayed as:

Edit EVALUATE PREDICATE Function dialog

## Components

#### **Available**

Displays the primary subject area as well as any related subject areas that have been added to the "Subject Areas pane". Use this area to select columns to use in the formula. To insert a column in a formula, select the column and click the Add Column button.

#### **Formula**

Use this area to create the EVALUATE\_PREDICATE function's formula.

You can enter the formula manually or use these components:

- **Variable** > Use this button to select the type of variable (**Session**, **Repository**, or Presentation) to add. The "Insert Variable dialog" is displayed, where you specify the name of the variable.
- + Use this button to insert the addition operator to add values.
- — Use this button to insert the subtraction operator to subtract values.
- x —Use this button to insert the multiplication operator to multiply values.
- / Use this button to insert the division operator to divide values.
- % Use this button to insert the percent sign to divide values by 100.
- ( Use this button to insert the left parenthesis to enclose data in brackets.
- ) Use this button to insert the right parenthesis to enclose data in brackets.
- Use this button to insert the concatenation operator.

#### **Notes**

To manually enter a variable in an expression in the Formula area, follow the guidelines for referencing variables in expressions described in Table 2–2.

## **New Filter dialog**

Use this dialog to create or edit a column filter, to specify a condition under which an action link is to be enabled, or to specify a condition for applying graph formatting.

For more information, see:

- "What are Filters and Selection Steps?"
- "Creating or Editing Column Filters"
- "Editing the Formula for a Column"
- "Adding Actions to Analyses"
- "Formatting the Visual Appearance of Graphs"

This dialog is also displayed as:

**Edit Condition dialog** Edit Filter dialog New Condition dialog

## Components

**Note:** When this dialog is displayed as the New Condition dialog or the Edit Condition dialog, not all components are available.

#### Column

Displays the name of the column for the filter.

#### **Edit Formula**

Use this button to display the "Edit Column Formula dialog" where you can modify the column's formula for use with the filter that you are creating.

### **Data Time Zone**

Use this button to select the time zone.

#### Operator

Use this list to select the operator to apply to the value specified in the **Value**. For guidelines, see "Operators".

Note that, if your repository is configured for double columns, and you are creating the filter on a display column and select the contains all, contains any, does not contain, begins with, ends with, is LIKE (pattern match), or is not LIKE (pattern match) operator, then filtering will always be done by display values, not code values. For more information on double columns, see "Understanding the Double Column Feature".

#### Value

Use this field to specify one or more values to use when applying the filter or condition. You can:

- Type values.
- Select values from the list box or calendar.

To search for specific values from the list box, click **Search** in the list box. The "Select Values dialog" is displayed, where you can search for and select values.

If your repository is configured for double columns, and you are creating the filter on a display column, then by default you specify display values. However, if your organization allows the display of code values, then you can specify code values rather than display values, but only if you use one of the following operators:

- is equal to / is in
- is not equal to / is not in
- is between

To specify code values, select the **Select by** *Code Column* check box.

**Note:** If you create or modify a filter or condition using code values and, subsequently, the code column for that value is removed from the Presentation layer using the Administration Tool, then filtering by code values remains in effect (although the code values will not be visible). When you edit the filter or condition, the code value (for example, 1) will be converted to the equivalent display value (for example, Excellent).

For more information on double columns, see "Understanding the Double Column Feature".

### Select by Code Column

Available only if your repository is configured for double columns, you are creating the filter on a display column whose code column is exposed in the repository Presentation layer, and you selected either the is equal to / is in, is not equal to / is not in, or is between operator.

Use this box to allow code values to be specified in the **Value** field. When this box is selected, the list box displays both the code values and the display values (for example, 1 - Beverages) for selection and the Filter by box is selected but disabled. When this box is deselected, the list box displays only the display values (for example, Beverages).

#### Filter by Code Column

Available only if your repository is configured for double columns and you selected either the is equal to / is in, is not equal to / is not in, or is between operator.

Use this box to specify whether the column is to be filtered by code values or display values. Select this box to filter by code values. Deselect this box to filter by display values.

#### **All Values**

Use this link to view the complete list of values without the filter applied.

#### **Limited Values**

Use this link to view a list of values with the filter applied.

#### Saved Analysis

Available if you selected the **is based on the results of another analysis** operator.

Use this field to specify the saved analysis whose results are to be the basis for the filter.

#### Relationship

Available if you selected is based on the results of another analysis in the Operator field.

Use this list to select the appropriate operator to determine the analysis' column results that will set the filter.

#### Use values in column

This field displays if you selected the is based on the results of another analysis operator.

Use this list to view a matching column name in the analysis, if there is one. If you want to use another column, then select it instead. The values in this column will set the filter.

#### **Add More Options**

Available for all operators except is prompted or the is based on the results of another analysis.

Click this button to add a SQL expression or a session, repository, or presentation variable to the filter. You can add one or more of these options. When you select an option, a corresponding field is displayed where you specify either a SQL expression or the name of the variable.

When this dialog is displayed as the New Conditions dialog from the "Column Properties dialog: Conditional Format tab", you can add only a presentation variable.

For more information on variables, see "Using Variables".

#### SQL Expression

Available if you selected **SQL** Expression from the **Add More Options** list.

Enter or paste a SQL expression.

#### **Session Variable**

Available if you selected **Session Variable** from the **Add More Options** list.

Enter the name of the session variable that you want to use, for example USER.

#### Repository Variable

Available if you selected **Repository Variable** from the **Add More Options** list.

Enter the name of the repository variable that you want to use, for example prime\_ begin.

#### Variable Expr.

Available if you selected **Presentation Variable** from the **Add More Options** list.

Enter the name of the presentation variable that you want to use, for example MyFavoriteRegion.

#### (default)

Available if you selected **Presentation Variable** from the **Add More Options** list.

(Optional) Specify a default value to be used if no value is returned by the presentation variable.

#### **Delete**

Click this button to delete the corresponding value and field.

#### Clear All

Click this button to remove all values and codes. If you added a SQL expression or variable to the filter, then clicking the **Clear Values** button will delete all related values and field.

#### **Protect Filter**

Select this option to protect the filter's value from being overridden by either a prompt value or when the user navigates to another analysis. When the user navigates from one analysis to another analysis, any prompt values that were specified in the first analysis transfer to the second analysis.

#### Convert this filter to SQL

Select this option to convert the filter that you have built to a SQL WHERE clause that you can edit manually. Note that after you convert a filter to SQL code, you can view and edit the filter item as SQL code in the "Advanced SQL Filter dialog", only. You can no longer view and edit the filter in the Edit Filter dialog.

## **Related Topics**

"Applying a Named Filter to an Analysis"

"Combining and Grouping Column Filters"

"Using a Saved Analysis as a Filter"

"Creating and Editing the SQL Statements for a Column Filter in an Analysis"

## **Operators**

Use the guidelines shown in the following table when choosing an operator and specifying the required values. The operator list from which you can choose is populated based on the function you are performing (for example, creating a filter or creating a dashboard prompt) and the type of column that you selected.

| Operator                    | Usage Guidelines  |
|-----------------------------|---|
| is equal to / is in         | Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results will include only records where the data in the column matches the value in the filter.  |
| is not equal to / is not in | Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results will include only records where the data in the column does not match the value in the filter.   |
| is less than                | Valid for a column that contains numbers or dates. Specify a single value. Results will include only records where the data in the column is less than the value in the filter.   |
| is greater than             | Valid for a column that contains numbers or dates. Specify a single value. Results will include only records where the data in the column is greater than the value in the filter.  |
| is less than or equal to    | Valid for a column that contains numbers or dates. Specify a single value or multiple values. Results will include only records where the data in the column is less than or the same as the value in the filter.   |
| is greater than or equal to | Valid for a column that contains numbers or dates. Specify a single value or multiple values. Results will include only records where the data in the column is greater than or the same as the value in the filter.  |
| is between                  | Valid for a column that contains numbers or dates. Specify two values. Result will include only records where the data in the column is between the two values in the filter.   |
| is null                     | Valid for a column that contains text, numbers, or dates. Do not specify a value. The operator tests only for the absence of data in the column. Results will include only records where there is no data in the column.  |
|                             | Sometimes it might be useful to know whether any data is present, and using the is null operator is a way to test for that condition. For example, suppose your business has a worldwide address book and you want to extract the United States addresses only. You could do this by checking for the presence or absence of data in the "State" field. This field should be unpopulated (null) for non-United States addresses and populated (not null) for United States addresses. You can obtain a list of United States addresses without the need to check the column for a specific value. |
| is not null                 | Valid for a column that contains text, numbers, or dates. Do not specify a value. The operator tests only for the presence of data in the column. Results will include only records where there is data in the column.  |
| is ranked first             | Valid for a column that contains text or dates. Specify a single value. Results will include only the first n records, where n is a whole number specified as the value in the filter.  |
|                             | This operator is for ranked results. For example, you could use this operator to obtain a list that contains the first ten brand names in alphabetical order.   |

| Operator                                    | Usage Guidelines   |
|---|--|
| is ranked last                              | Valid for a column that contains text or dates. Specify a single value. Results will include only the last n records, where n is a whole number specified as the value in the filter.  |
|   | This operator is for ranked results. For example, you could use this operator to obtain a list of the dates of the last ten sales transactions.  |
| is in top                                   | Valid for a column that contains numbers. Specify a single value. Results will include only the first n records, where n is a whole number specified as the value in the filter.   |
|   | This operator is for ranked results. For example, you could use this operator to obtain a list of the top ten sales in dollars.  |
| is in bottom                                | Valid for a column that contains numbers. Specify a single value. Results will include only the last n records, where n is a whole number specified as the value in the filter.  |
|   | This operator is for ranked results. For example, you could use this operator to obtain a list of the customers reporting the fewest numbers of problems.  |
| contains all                                | Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results will include only records where the data in the column contains all of the values in the filter.  |
| does not contain                            | Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results will include only records where the data in the column does not contain any of the values in the filter.  |
| contains any                                | Valid for a column that contains text, numbers, or dates. Specify a single value or multiple values. Results will include only records where the data in the column contains at least one of the values in the filter.   |
| begins with                                 | Valid for a column that contains text, numbers, or dates. Specify a single value. Results will include only records where the data in the column begins with the value in the filter.  |
| ends with                                   | Valid for a column that contains text, numbers, or dates. Specify a single value. Results will include only records where the data in the column ends with the value in the filter.  |
| is LIKE (pattern match)                     | Valid for a column that contains text. Specify a single value or multiple values. Requires the use of a percent sign character (%) as a wildcard character. You might specify up to two percent sign characters in the value. Results will include only records where the data in the column matches the pattern value in the filter.        |
| is not LIKE (pattern match)                 | Valid for a column that contains text. Specify a single value or multiple values. Requires the use of a percent sign character (%) as a wildcard character. You might specify up to two percent sign characters in the value. Results will include only records where the data in the column does not match the pattern value in the filter. |
| is prompted                                 | Valid for a column that contains text, numbers, or dates. Choosing this operator for a filter's column flags it as ready to be filtered by a prompt. This means when a prompt is used, results will include only records where the data in the column that is prompted matches the user's choices.   |
|   | Note: This operator is required for columns included in prompts where no prefiltered values are desired.   |
| is based on the results of another analysis | Valid for a column that contains text, numbers, or dates. This operator constrains the filter by using the value of a column from the same subject area in another saved request.  |

| Operator    | Usage Guidelines  |
|-------------|---|
| prompt user | Valid for a column that contains text, numbers, or dates. Choosing this operator allows the user to select the dashboard or analysis' prompt operator at runtime. |

# **New Folder dialog**

Use this dialog box to specify the folder to create in the Oracle BI Presentation Catalog.

## New Prompt dialog

Use this dialog to define the column, variable, or currency prompt.

For more information, see "Creating or Editing a Column Prompt".

This dialog is also displayed as:

Edit Prompt

Edit Prompt: Column dialog New Prompt: Column dialog

### Components Common to Column, Currency, and Variables Prompts

**Note:** This section describes the components that are common to column, currency, and variable prompts. Additional components are available for the column and variable prompts. See "Additional Components for Column and Variable Prompts".

#### Label

Use this field to enter an appropriate label for the prompt. For example, "Please select a date range," "Please select a currency," or "Please select a percentage by which to calculate the region's dollars." You can include HTML markup tags in the caption, such as <b>, <font>, and .

#### Description

Use this field to enter a short description of the prompt. This description is displayed as tool tip text, which is displayed when the user mouses over the prompt's label in the dashboard or analysis.

### Additional Components for Column and Variable Prompts

#### **Prompt for Column**

This field displays for column prompts, only.

Use this field to view information about the column that you selected. You can edit the formula that displays in this field by clicking the Edit Formula button. For more information, see "Edit Column Formula dialog".

#### **Edit Formula**

This field displays for column prompts, only.

This button displays for attribute and measure column types, but not for hierarchical columns; however, if you are creating a column or variable prompt and choose to modify the column's formula, you can specify a hierarchical column in the column's formula.

Use this button to display the "Edit Column Formula dialog" where you can modify the column's formula for use with the prompt.

If you added a SQL case statement to the analysis' column instance and you want to use that case statement within the prompt, then you must specify the same SQL case statement in the prompt's column formula.

For example, on the analysis' column, you can use the Edit Formula functionality to create a "Beverage Type" bin to group a long list of beverages into two categories called "Carbonated Beverages" and "Fruit Juices and Non-Carbonated Beverages." When building the prompt, you then add the same bin or SQL case statement to the prompt's column formula. When the prompt is completed and previewed, the "Carbonated Beverages" and "Fruit Juices and Non-Carbonated Beverages" items are displayed in the prompt's value list.

#### **Data Time Zone**

Use this field to set the time zone.

### **Prompt for**

This field displays for variable prompts, only.

Use this field to select the type of variable that you want to create and to type a name for the variable. This variable name will be the name that you add to the analysis or dashboard where you want the variable prompt's value specified by the user to display. Currently, you can create only presentation variables.

#### Included Code Column

This field displays for display columns, only.

Displays the name of code column that is mapped to the display column.

For more information on display and code columns, see "Understanding the Double Column Feature".

#### Operator

This field displays for column prompts, only.

Use this list to select the prompt's operator. For more information about each operator, see "Operators".

Note the following items:

- If you want the user to select the operator at runtime, then select the \*Prompt User operator.
- If you are creating a dashboard prompt for an Oracle Business Intelligence Publisher report that receives its data from an Oracle BI Server or SQL Server, then you must set the operator to is equal to/is in.
- If you are creating a prompt that will include a group in the prompt's value selection list, the Operator must be set to either is equal to/is in or is not equal to/is not in. For more information about groups, see "Working with Groups and Calculated Items".
- If your repository is configured for double columns, and you are creating the prompt on a display column and select the contains all, contains any, does not contain, begins with, ends with, is LIKE (pattern match), or is not LIKE (pattern match) operator, then filtering will always be done by display values, not code values. For all other operators, filtering will be done by code values. For more information on double columns, see "Understanding the Double Column Feature".

#### **User Input**

This field displays for column and variable prompts.

Use this list to specify the user interface component where the user selects the prompt values (for example, prompt the user with radio buttons to select only one prompt

value or prompt the user with a text box that requires the user to enter one or more specific prompt values). The input option that you select will determine the fields that display in the dialog. For a description and example of each user input option type, see "What Types of User Input Options Can I Use With a Column or Variable Prompt?"

### **User Input Values**

This field displays for column and variable prompts.

Use this field to specify which data values you want to display in the user input method that you selected. For example, if you selected the Choice List user input method and the All Column Values option, the user will select the prompt's data value from a list that contains all of the data values contained in the data source.

Note that for attribute columns and measures column, all choice list values type are available.

The *User Input* Values options are:

- All Column Values Indicates that users can choose from a list that contains all the existing values or members.
  - If the number of column values exceed the number that is specified in the Page **Values** box, the list that displays in the view will contain a **Search** link that the user clicks to access the Select Values dialog. Users can use the search to locate more values.
- Custom Values Indicates that users can select from a list of prompt values that you created rather than the values supplied by the column.
- Specific Column Values For attribute columns and measures column, this option indicates that users can choose from a list that displays the values that you have selected for the column. This option is useful when prompting for multiple columns, or when the results already contain a filter. It prevents the user from choosing values that would result in no data. For example, suppose an analysis contains a country column and a city column, and already contains the filter Country=France. By selecting limited values for the city column prompt, the choices are constrained to cities in France only, which prevents the possibility of the user choosing a city that is not located in France, such as Country=France and City=Rome.

This list can also contain a group as a selection option. Users can also click **Search** from the list of values to search for a value that does not display in the list of values. You can click the **Plus** button to display the Select Values dialog where you can search for and select the desired values to display to users. In the Column Values pane, you see all values for the column and you can select only those that you want users to choose from. If you are using either the is equal to/is in or the is not equal to/is not in operator, then you can expand the Catalog pane to browse and add a saved group. When you select a group, it will be presented as one value in the list of values. For example, if the group is named Sales by Region and contains the Eastern and Southern members, within the prompt's list of values you will see Sales by Region and when you select this value, the analysis will contain the Eastern and Southern members.

For hierarchical columns, this choice indicates that a list is displayed from which users can choose among the members that you have selected for the column. This list can also contain a group as a selection option. See the above paragraph for more information.

**SQL Results** – Indicates that users can choose from a list that contains the values that you have specified through a SQL statement. A box is displayed where you

can enter a SQL statement that creates the list of values from which users can choose. You will likely want to enter a WHERE clause as part of the SQL statement to limit the number of values from which users can select and include sorting commands to have the values display in a logical order.

If the SQL statement returns a list of values that exceeds the number that is specified in the Page Values box, a Search link will display and when the user clicks this link, the Select Values dialog displays. Users cannot search in the Select Value dialog, but they can display more values to select from.

**Members of Groups** – This option is not available for hierarchical columns.

Indicates that users can choose from a list that contains all members included in a specified group or groups. For example, if the group you select is named Sales by Region and contains the Eastern and Southern members, at runtime you will see Eastern and Southern regions listed in the prompt's list of values.

**All Column Values and Specific Groups** – This option is not available for hierarchical columns. This option is available for the is equal to/is in or the is not equal to/is not in operators, only.

Indicates that users can choose from a list that contains all column values and the groups that you have selected. When you select a group, it will be presented as one value in the list of values. For example, if the group is named Sales by Region and contains the Eastern and Southern members, within the prompt's list of values you will see Sales by Region and when you select this value, the analysis will contain the Eastern and Southern members.

**Note:** If you have a prompt with a choice list value that contains a group and the prompt is then used to override a **Keep only** or **Remove** selection step, then Oracle BI EE ignores the group at runtime. If the override selection step is an **Add** selection step, then Oracle BI EE uses the group.

#### **Select Values or Clear Values buttons**

These buttons display for column and variable prompts. These buttons display if you selected Custom Values, Specific Column Values, Members of Groups, or All Column Values and Specific Groups in the User Input Values field.

Use the **Select Values** button to open the Select Value(s) dialog to search for and add values or groups to the Select List. The prompt presents this values list to the user. This functionality is useful when you want to limit the number of user choices to a small, intuitive list. For example, if you chose Radio Buttons as the user input method and created a specific values list of five dates, the prompt presents the user with five radio buttons, one for each date. For more information, see "Select Values dialog".

Use the **Clear Values** button to remove all of the selected values and groups.

#### **SQL Statement**

This field displays if you selected **SQL Results** in the *User Input* Values field.

Use this field to create or edit a SQL statement. When run, the SQL statement produces a group of values that is displayed in the Select List.

### Include "All Choices" choice in the list

This check box displays if you selected either the Choice List, List Box, or Radio **Buttons** user input type.

Use this check box to display the "All Choices" option in the value list. Users can select the "All Choices" option to select all of the values in the list.

#### Limit values by

This check box displays if you selected either the Check Box, Choice List, List Box, or **Radio Buttons** user input type.

Use this check box to select an existing prompt column to limit the values that display in the select list for the prompt column that you are creating. This type of limitation is also known as a cascading prompt. For example, if a prompt contained a column prompt called Region and you create another column prompt called District and specify to limit it by the Region column prompt, the users will only be allowed to select regions located within the district that they selected. If the users select the Central District, then they will only be allowed to select a Region of Chicago, Minneapolis, or Milwaukee.

#### Enable user to select multiple values

This check box displays if you selected either the Choice List or List Box user input type.

Use this check box to allow the user to select more than one prompt value from the list of values. If you selected the Choice List user input option, then the prompt value selection list will display a check box before each prompt value.

If you selected the **List Box** option, then to select:

- Multiple values, the user presses the Control key, then clicks the values
- A range of values, the user clicks the first value in the range, presses the Shift key, then clicks the last value in the range

If you are creating the prompt on a hierarchical column, this option will be selected and you cannot deselect it. If you are creating a prompt with only one value, use the "Select Values dialog" to select one value.

#### Enable user to type values

This check box displays if you selected the **Choice List** user input type.

Use this check box to allow the user to choose values from the choice list or place the cursor and type a value into the selection field. For example, select this check box when the prompt's value list is lengthy and the user does not want to scroll through or search the list, or the user knows the specific prompt value. This option is useful when the prompt contains non-measure numerical values (for example, a product ID or employee ID) that cannot be easily or quickly located in a list of values.

If this option and the **Enable user to select multiple values** option are selected, users can enter multiple values (using the semicolon delimiter) into the prompt's selection field.

### Require user input

This check box displays for all user input types.

Use this check box to make the prompt required. When the prompt is required, users cannot click the Go button to execute the prompt query until they have selected a prompt value. When you select this option, an asterisk displays to the left of the prompt label to indicate to the user that the prompt is required.

#### Slider Values

This field displays for the **Slider** user input type, only.

Use this field to specify the prompt values and value range that you want to display in the slider. Currently, Within Specific Limits is the only available Slider Values option.

#### Lower limit

This field displays for the Slider user input type, only.

Use this field to specify the beginning prompt value that will display on the left-end of the slider. This prompt value is the lowest value that the user can select.

#### **Upper limit**

This field displays for the **Slider** user input type, only.

Use this field to specify the ending prompt value that will display on the right-end of the slider. This prompt value is the highest value that the user can select.

#### **Show Spinbox**

This check box displays for the **Slider** user input type, only.

Use this check box to display a spinbox where the user can click arrows to select a value. When the user clicks the spinbox's arrows, the slider resets to the same value. Clear this check box to remove the spinbox from the prompt.

#### **Compress Values**

This check box displays for the **Slider** user input type, only.

Use this check box to remove the zeros from values of 1,000 and over. For example, 1,000 displays as 1K and 1,000,000 displays as 1M. If you select this option and are using a non-English environment, the compressed value label will not be translated. The value label will display in English (for example, 1K or 1M).

#### Slider Orientation

This field displays for the **Slider** user input type, only.

Use this field to specify whether you want the slider to be displayed horizontally or vertically on the prompts page.

#### Label location

This field displays for the **Slider** user input type, only.

Use this field to specify where you want the prompt's label to display in relation to the slider. Currently, Left of Slider is the only available Label location option.

#### Slider size

This field displays for the **Slider** user input type, only.

Use this field to choose the size of the slider. You can select **Small**, **Medium**, or **Large**.

#### **Default selection**

Use this field to specify the prompt value that you want users to see initially. First select one of the following options, then (except for the **None** option) specify the value in the box that is displayed:

**None** – Select this option if you do not want to specify a default selection.

- Specific Values Select this option to choose a specific default value from the complete prompt list that Oracle Business Intelligence generates based on the option you selected in the Choice List Values field. When you select this option, the Default value field and Add or remove values button are displayed. Click the Add or remove button to access the Select Value(s) dialog where you can search for, select, and deselect a default value. For more information, see "Select Values dialog".
- All Column Values This option is available only when the Include "All Choices" choice in the list option is selected. Select this option to specify the "All Choices" default value for the prompt.
- **Variable Expression** Select this option to specify a variable or an expression containing a variable. When you select this option, the Default value field is displayed in which you enter the variable or expression.
  - For guidelines on referencing a variable in an expression, see Table 2–2. For more information on variables, see "Using Variables".
- **Server Variable** Select this option to specify a session or repository variable as the default value. When you select this option, the Default value field is displayed in which you enter the name of the variable. For a session variable, prefix the name with NQ SESSION and a period, for example NQ SESSION. USER.

For guidelines on referencing a server variable, see Table 2–2. For more information on variables, see "Using Variables".

**Note:** If you specify a session variable, and a request variable exists with the same name, the value of the request variable is used instead of the value of the session variable. For more information on request variables, see "What Are Request Variables?"

**SQL Results** — Select this option to set the prompt's default value based on the results of a logical SQL statement. If necessary, a presentation or server variable can be used in the logical SQL statement (for example, variables can be referenced in the "where" clause to constrain the default value based on another prompt).

Each row of data returned by the SQL statement is treated as a value, and each row can have one or two columns. If each row contains one column, this would be both the display value and code value. If each row contains two columns, the first column is the display value and the second column is the code value. If the SQL statement returns multiple rows but the user interface can only accept one value, then the first row is used.

If your repository is configured for double columns, and you are creating the prompt on a display column and specify a SQL statement, filtering will be done on display values, not code values.

### **Enable user to select by Code Column**

This option displays for display columns, only.

Select this option to add a check box to the prompt that allows the user to specify whether to select prompt values by display values (for example, "Beverages") or by code-display values (for example, "1-Beverages"). This check box is automatically labeled with the partial caption of "Select by." If you select this option, add a label in the **Label** field that identifies what the user will be selecting by.

#### Label

This field displays for display columns, only.

Use this field to complete the "Select by" label for the check box that allows the user to specify whether to select prompt values by display values (for example, "Beverages") or by code-display values (for example, "1-Beverages"). For example, you might enter "product codes" so that the check box label is "Select by product codes."

#### Set a variable

Use this field to create a new variable that this column prompt is to populate.

Select the type of variable, either **Presentation Variable** or **Request Variable**, then, enter a name for the variable. Note if you selected Request Variable, you must use the name of the session variable that you want this request variable to override.

**Note:** If you are creating a dashboard prompt for an Oracle BI Publisher report that receives its data from an Oracle BI Server or SQL Server, then you must type "Presentation" in the Variable Name field.

For more information about using variables, see "Using Variables".

#### Column

This field displays if you selected either All Column Values, Specific Column Values, or **Members of Groups** from the **User Input Values** field.

This field displays the name of the column upon which you selected to populate the variable prompt's list of values. This field is read-only. To specify a different column name to display in this field, you must click the Select Column button and browse for and select another column.

#### Select Column

Use this button to display the "Select Column dialog" where you can browse for and select the column that you want to use to generate the prompt's list of values.

## **New Related Document dialog**

Use this dialog to add a document that provides supporting information to a scorecard object, such as an objective. A related document that you add is displayed as a link in the Related Documents table and can link to a dashboard page or analysis that is stored in the Oracle BI Presentation Catalog or to a Web address. For example, you might want to add analysis as a related document for an objective.

For more information, see:

- "Collaboration pane"
- "Related Documents area"

This dialog is also displayed as:

Edit Related Document dialog

## Components

#### Name

Use this field to enter the text to be displayed as the link to the related document.

If you did not specify a name, Oracle BI EE will default to the name of the dashboard or analysis, or a shortened form of the URL.

Displays the following options to specify the type of related document:

- **BI Content** Specifies that the related document is a dashboard page or analysis from the catalog.
- **Web Address** Specifies that the related document is a Web address.

#### Location

If you selected as the type:

- BI Content, this field displays the path to the dashboard page or analysis. This path is read-only. To specify another path, click the **Browse** button and select another dashboard page or analysis.
- **Web Address**, enter or paste the URL into this field.

#### **Browse**

This option is available only if you selected the **BI Content** type. Displays the "Select an Object from the BI Catalog dialog", where you select the dashboard page or analysis from the catalog.

## **New Scorecard dialog**

Use this dialog to create a new scorecard.

For more information, see:

- "What is Oracle Scorecard and Strategy Management?"
- "How Do I Create a Scorecard?"
- "Creating Scorecards"

## Components

#### Name

Use this field to enter the name of the scorecard, for example, Marketing.

#### Location

Use this list to select a folder or create a new folder in which to create the scorecard. To create a new folder, click the New Folder option in the list to display the "Create New Folder dialog". To select a folder that is not listed, click the Folder button to display the "Select Scorecard Location dialog".

### Description

Use this field to enter a description of the scorecard.

## **Use Default Perspectives?**

Use this check box to specify whether you want to use the default perspectives defined by the Balanced Scorecard Methodology. You can associate initiatives and objectives with these perspectives or to other custom perspectives that you create. For more information on perspectives, see "What Are Perspectives?"

## Open dialog

Use this dialog to open objects, select objects, or save objects.

This dialog is also displayed as:

Choose Delivery Content dialog

Create New Folder dialog

Save dialog

Save Action dialog

Save Action As dialog

Save Agent dialog

Save As dialog

Save Selection Steps dialog

Select dialog

Select Action dialog

Select Agent Location dialog

Select Analysis dialog

Select an Object from the BI Catalog dialog

Select BI Content For Action dialog

Select Condition dialog

Select Dashboard dialog

Select Existing Action dialog

Select Existing Agent dialog

Select KPI dialog

Select a KPI dialog

Select Location dialog

Select Request dialog

Select Scorecard Location dialog

## Components

#### **Folders**

Use this pane to select a folder in the Oracle BI Presentation Catalog to display in the **Open In** or **Save In** area.

### **Show Folder Tree**

Displays the catalog folders in a tree structure.

#### **Show Favorites**

Displays your favorite folders in the Folder pane.

#### Open In or Save In

Displays the folder that is selected in the Folders pane and its contents.

You can save any object in any location. However, the "Save In" field sometimes recommends the best location based on the object type that you are saving. For example, you should save filters, groups, and calculated items within a subject area folder so that these items are available when you build an analysis for the same subject area. If a subject area folder does not exist in your /My Folders or within /Shared Folders, then a subject area folder is created automatically. The "Save In" field defaults a save path to /My Folders/Subject Area Contents/<subject area>, however, the dialog's Folders area will display all instances of the subject area folder in the catalog.

You can save other objects such as analyses, prompts, and conditions in any folder. Bear in mind the distinctions between shared and personal folders, when deciding whether to share the object that you are saving with other users.

#### Up

Selects the folder that is one level higher in the folder structure.

#### **New Folder**

Adds a new empty folder under the folder that is specified in the **Open In** or **Save In** field.

#### Change list view type

Displays the following options to change the view of the list:

- **List** Displays the contents of the folder that is specified in the **Open In** or **Save In** field as a list of file or folder names preceded by small buttons.
- **Details** Displays the contents of the folder that is specified in the **Open In** or Save In field as a list of file or folder names preceded by small buttons and provides detailed information about the objects, including, name, type, the date modified, and owner.

#### Name

Use this box to specify the name of the object to open, select, or save.

To specify the name of the object, do one of the following:

- Click an object in the **Open In** area
- Enter the name of the object

The name is displayed in the tree structure when a user moves the mouse over the object.

#### Description

Use this field to enter a description of the object.

Descriptions are displayed when administrators use the Oracle Business Intelligence Catalog Manager. Descriptions for analyses are helpful when including them on dashboard pages.

#### **Display Label**

Available only for selection steps.

Use this field to enter the label for the group when it is displayed in a view. The display label can differ from the name of the group as it is saved in the catalog.

#### **Steps**

Available only for selection steps.

Click this button to save the selection steps for a group. The results of the selection are refreshed at runtime.

#### Results

Available only for groups.

Click this button to save a group as a list of members, rather than as a list of steps.

### Replace current action (or steps, or condition) with a reference to the saved action (or group, or condition)

Use this box in the following situations:

- When you are saving an action or condition to the catalog, to specify whether to replace the reference to the current action or condition with the saved action or condition.
- When you are saving a series of steps to the catalog, to specify whether to replace the series of steps with the name of the group. For example, if you have created several selection steps for the Product column, click the Save button, then select this box in the dialog, the several steps are replaced by a single "Start with" step for the group.

Select this box to replace the reference with the saved action, group, or condition. Deselect this box to maintain the reference to the action, group, or condition.

## Page Properties dialog

Use this dialog to edit the content in a briefing book. You can change the content type, the number of navigation links to follow, and the content description.

For more information, see:

- "Working with Briefing Books"
- "Editing Briefing Books"
- "Edit Briefing Book dialog"

## Components

### **Content Type**

Use this area to select one of the following options:

- **Updatable** Refreshes the data whenever the briefing book is downloaded, or when it is specified as the delivery content for an agent.
- Snapshot Adds the content in its current state. Snapshot content preserves the original data and is not updated when the briefing book is rerun. Snapshot content will not be updated when using agents.

#### **Follow Briefing Book Navigation Links**

This option applies only to updatable content, not to snapshot content.

Use this area to select one of the following options:

- **No** Specifies that briefing book navigation links are not to be followed.
- **Yes** Specifies that briefing book navigation links are to be followed. If you select this option, then you must also specify the number of links to follow.
- **Number of links to follow** Specifies the number of briefing book navigation links to be followed, if you selected the **Yes** option.

#### Description

Use this field to enter a description of the content being saved to the briefing book.

### **Related Topics**

"Adding Content to New or Existing Briefing Books"

"Downloading Briefing Books"

"Adding a List of Briefing Books to a Dashboard Page"

"Using Agents to Deliver Briefing Books"

## **Permission dialog**

Use this dialog to set permissions for a catalog object. Only a user with full permissions on a catalog object is able to see or change the permissions for that object. If you are using this dialog to assign permissions to a catalog object and need more information about privileges that further refine the tasks users can perform, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

For more information, see:

- "Properties Buttons for Objects"
- "Changing the Properties of a Dashboard and its Pages"
- "What Are Permissions?"
- "Assigning Permissions"

This dialog is also displayed as the:

Section Permissions dialog

## Components

**Note:** Not all components are available in each version of the dialog.

#### Location

Displays the folder in which the object resides.

#### Owner

Displays the account name of the object owner. To change the name that displays in this field, go to the **Owner** column in the **Permission** area and select the button corresponding to the account you want to assign as the owner. Note that this field sets the catalog owner of the object, which is not the same as setting the business owner for a KPI or scorecard object. For more information about the business owner, see "KPI editor: General Properties page".

#### **Permissions**

Use this area to add accounts and assign permissions. Note the following options:

- To add accounts and assign permissions, use the **Permissions** toolbar buttons.
- To assign a permission to an account, in the **Permission** column, select the permission from the **Permission** list.
  - If you are working with section permissions, select **Granted** to include the section in the corresponding account's dashboard. Select **Denied** to remove the section from the corresponding account's dashboard. Where applicable, these permissions will override the permissions that are set on the catalog object.
  - If you are working with catalog permissions, see "Permissions Available by Object Type" and "Permission Definitions" for more information about the permission options. For information about the options available for the Custom permission option, see "Custom Permissions dialog". Note that most

of the permissions in this list are compound permissions, made up of the most commonly used combinations of permissions, so when you select a permission from the list, Oracle BI EE displays a label listing what the selected permission includes. For example, if you selected the Modify permission, Oracle BI EE displays "Read, Write, Delete." If none of the permissions available in the permissions list meets your requirements, you can select the **Custom** option to access the Custom Permissions dialog where you can create your own compound permission for the object.

To change the owner of the object, select the button in the **Owner** column for the account that you want to designate as the owner.

#### **Permissions Toolbar**

This toolbar contains the following buttons:

- **Apply effective permissions** Use this button to assign permissions based on the user's membership in a group. For example, if a user belongs to the Marketing group account which has full control permissions to a Corporate Sales scorecard directory, then the user also has full control to the directory.
- **Replace with parent's folder permissions** Use this button to inherit the permissions defined for the highest folder in the directory hierarchy.
- **Set parents folders permission to "Traverse Folder"** Use this button skip over any folders to which the permissions should not be applied.
- Add users/roles Use this button to display the "Add Application Roles, Catalog Groups, and Users dialog", where you select accounts to add.
- **Apply permissions for selected users/roles** Displays the permissions menu. Use this menu to select a permission to assign to the selected account or accounts. To select multiple accounts, hold down the Control key and then click the accounts that you want. For more information about the permissions that you can select, see "Permissions Available by Object Type". For information about the options available for the Custom permission option, see "Custom Permissions dialog".
- **Delete selected users/roles** Use this button to delete the selected accounts.

#### Apply permissions to sub-folders

Use this option to assign permissions to all constituent objects and folders. For example, if you are working with a scorecard, selecting this option assigns permissions to all scorecard components such as the perspectives, diagrams, and maps.

#### Apply permissions to items within a folder

Use this option to assign permissions to individual objects that you select in the folder.

## Perspectives pane

Use this pane to:

- Create custom perspectives
- Edit or view the four standard perspectives defined by the Balanced Scorecard Methodology (Financial, Customer, Internal Process, and Learning and Growth) and any custom perspectives that you have created
- Delete perspectives

For more information, see:

- "What Are Perspectives?"
- "Creating Custom Perspectives"

This pane is part of the "Scorecard editor".

## Components

#### **Perspectives List**

Displays a list of the perspectives for the scorecard.

#### **Toolbar**

This toolbar contains the following buttons:

- New Perspective Use this button to display the "Scorecard editor: Perspective tab", where you create a new perspective.
- **Open** Use this button to display the selected perspective for viewing or editing, depending on your privileges and permissions.
- **Delete** Use this button to delete a perspective that you created or for which you have the permissions to delete.

## **Preview pane**

Use this pane to preview the object that you selected in the Catalog page. Not all object types have previews available. For example, if you select an analysis or dashboard, those objects display in the Preview pane, but none of the interactive features such as drilling, pivoting, and sorting are available. However, if you select an action, the "View not available" message is displayed in Preview pane.

Working with the Preview pane expanded can consume considerable system resources, so Oracle recommends that you only open the Preview pane when needed.

This pane is part of the "Catalog page".

## **Print Options dialog**

Use this dialog to specify page settings and header and footer content for the PDF output, when printing a dashboard or views.

Dashboards are printed in Adobe Acrobat PDF format. Adobe Reader 6.0 or greater is required to print using Adobe PDF.

**Notes:** The print selections that you specify apply to PDF output only. If you then print the PDF on a local or network printer, then the print selections that are specified in the browser are in effect, such as the selection for paper size.

This dialog is displayed from the PDF and Print Properties option in the Tools menu on the "Dashboard builder" toolbar and Print Options button on the "Analysis editor: Results tab" toolbar.

For more information, see:

- "Adding Content to Dashboards"
- "Changing the Properties of Objects Added to Dashboard Pages"
- "Changing Print Options for Views"
- "Printing Views"

## Components

#### Paper Size

Use this list to select the size of the paper to use for the PDF output.

### Orientation

Use this list to select the orientation of the PDF output, either Portrait or Landscape.

#### **Print Rows**

Use this list to specify which rows are displayed in the PDF output, either all rows or only the visible rows.

#### **Hide Margins**

Use this box to show or hide margins.

#### Include Header and Include Footer

Use these boxes to include a header, a footer, or both in the PDF output. Click Edit to display the "Edit Footer or Header dialog", where you can specify the layout and formatting of the contents of the header or footer. You can also specify whether to display the header or footer in the HTML output.

## Privilege dialog

Use this dialog to control the privileges that users are granted. Privileges control the rights that users have to access the features and functionality of Oracle BI Presentation Services. This dialog is displayed from the "Administration: Manage Privileges page".

For more information, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

## Components

#### **Permissions**

Use this area to add accounts and grant or deny privileges.

To add accounts and grant or deny privileges, use the Permissions toolbar buttons.

To grant or deny a privilege to an account, in the **Permission** column, select either Granted or Denied.

#### **Permissions Toolbar**

This toolbar contains the following buttons:

- **Add Users/Roles** Use this button to display the "Add Application Roles, Catalog Groups, and Users dialog", where you select users, roles, or Catalog groups to add to the list in this dialog.
- **Apply Permissions for Selected Users/Roles** Use this button to grant or deny privileges to the selected accounts.
- **Delete Selected Users/Roles** Use this button to delete the currently selected accounts from the list in this dialog.

## **Prompt editor**

Use this editor to create prompts.

For more information, see:

- "Creating or Editing a Column Prompt"
- "Creating or Editing a Currency Prompt"
- "Creating or Editing an Image Prompt"
- "Creating or Editing a Variable Prompt"

This dialog is also displayed as:

Analysis editor: Prompts tab

## Components

#### **Definition**

Use the "Definition pane" to create prompts that allow users to select values that dynamically filter all views within the analysis.

### **Display**

Use the "Display pane" to view the prompt's layout and design.

#### **Toolbar**

The toolbar contains the following buttons:

- **Save** Use this button to save the prompt.
- **Save As** Use this button to make a copy of the prompt.

## **Properties dialog**

This dialog box is displayed when you select an object in the "Catalog page" and click **Properties** in the Tasks pane or click **More**, then **Properties** below the object.

## Components

#### General

Use this area to view and modify general information about the object. You can view the object's name, type (such as action or analysis), and location in the catalog. You can also enter a description for the object.

#### Access

Use this area to learn the following information about an object:

- The date and time when it was created.
- The date and time when it was last modified.
- The date and time when it was last accessed.

#### **Attributes**

Use the options in this area to set the following attributes of the object:

- **Hidden** Specifies that the object is hidden.
- **System** Specifies that the object is a system object.
- **Read Only** Specifies that the object is read-only.
- **Do Not Index** Specifies that the object should not be included in the index that is used by the full-text catalog search (Oracle BI Search). If you select to exclude the object, it will not display in the results of any full-text catalog search. The object, however, can still be found via the basic catalog search.

For information, see "Searching Using Full-Text Catalog Search".

## **Publish Page to Dashboard dialog**

Use this dialog to specify the shared dashboard to which you want to publish the current dashboard page so that you can share the page with others.

This dialog is displayed from the "Dashboard builder".

For more information, see "Publishing Dashboard Pages".

## Components

#### **Dashboard**

Use this field to specify the dashboard to which to publish the current dashboard page. Click Browse to display the "Select Dashboard dialog", where you select the dashboard.

## Related Items pane

Use this pane to identify the following:

- For a KPI (in the strategy tree only), objectives or KPIs that cause or effect the KPI.
- For an objective, other objectives and KPIs that cause or effect the objective as well as initiatives that drive the objective.
- For an initiative, the objectives that are driven by the initiative.

For more information, see:

- "Working with KPI Details"
- "Creating Initiatives"
- "Creating Objectives"

This pane is part of the "Scorecard editor: KPI Details tab", the "Scorecard editor: Initiative Details tab" and the "Scorecard editor: Objective Details tab".

## Components

#### Causes

This table is available only in the Scorecard editor: KPI Details tab and the Scorecard editor: Objective Details tab.

Displays other objectives or KPIs that impact or support the KPI or objective (typically on a higher level).

Use this table to view and manage the causes:

- To add an objective or a KPI, drag it from "Strategy pane" and drop it in the table. The "Causal Linkage dialog" is displayed, where you specify the strength of the cause and effect relationship and how the values of the added objective impact or support the values of the objective you are defining.
- To edit an causal linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.
- To delete a causal linkage, select it in the list and click the **Delete Row** button.

#### **Effects**

This table is available only in the Scorecard editor: KPI Details tab and the Scorecard editor: Objective Details tab.

Displays other objectives or KPIs that are supported by the KPI or objective (typically on a lower level).

Use this table to view and manage the effects:

- To add an objective or KPI, drag it from "Strategy pane" and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added objective impact or support the values of the objective you are defining.
- To edit an causal linkage, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.
- To delete an causal linkage, select it in the list and click the **Delete Row** button.

### Initiatives driving this Objective

This table is available only in the Scorecard editor: Objective Details tab.

Displays the initiatives that drive the objective.

Use this table to view and manage the initiatives:

- To add an initiative, drag it from "Strategy pane" and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added objective impact or support the values of the objective you are defining.
- To edit an initiative link, select it in the list and click the **Edit Row** button to display the Causal Linkage dialog.
- To delete an initiative link, select it in the list and click the **Delete Row** button.

### **Objectives Driven by this Initiative**

This table is available only in the Scorecard editor: Initiative Details tab.

Displays the objectives that are driven by the initiative.

Use this table to view and manage the objectives or KPIs:

- To add an objective, drag it from "Strategy pane" and drop it in the table. The Causal Linkage dialog is displayed, where you specify the strength of the cause and effect relationship and how the values of the added objective impact or support the values of the objective you are defining.
- To edit an objective link, select it in the list and click the Edit Row button to display the Causal Linkage dialog.
- To delete an objective link, select it in the list and click the **Delete Row** button.

## Rename dialog

Use this dialog to enter a different name for an object in the catalog (a KPI or a dashboard page, for example).

For more information, see:

- "Managing Objects in the Oracle BI Presentation Catalog"
- "Changing the Properties of Objects Added to Dashboard Pages"
- "Editing Dashboards"
- "Changing the Properties of a Dashboard and its Pages"

## Components

#### Name

Use this field to enter a new name for the object.

#### **Format**

This button is available when you rename a section in the "Dashboard builder".

Use this button to display the "Section Heading Properties dialog", where you can format the name of a section.

#### Use Dashboard Object name as link text

This option is available when you rename an analysis in the Dashboard builder.

Use this option to specify whether to use the new name of the analysis as the link text when you display analysis results as a link on a dashboard.

Select this box to use the new name you specify. Clear this box to use the name with which the analysis is stored in the catalog.

For more information on displaying the analysis results as a link, see the **Display Results** option on the Analysis Properties button described in "Properties Buttons for Objects".

#### Preserve references to old name of this item

This option is not available for all objects.

Use this option to specify that you want to maintain any existing references to the previous name of the object. This creates a shortcut with the old name that points to the renamed object in the Oracle BI Presentation Catalog. If you do not select this option, then existing references will break.

## Replace Icon dialog

Use this dialog to select an icon to represent an assessment range.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "Settings dialog: Assessment Mappings tab"

## Components

### **Standard Images**

Use the "Replace Icon dialog: Standard Images tab" to select a standard image to use as the icon.

### **Custom Images**

Use the "Replace Icon dialog: Custom Image tab" to specify a custom image to use as the icon.

# Replace Icon dialog: Custom Image tab

Use this tab of the "Replace Icon dialog" to specify a custom image to use as the icon to represent an assessment range.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "Settings dialog: Assessment Mappings tab"

# Components

#### **Web Address**

Use this field to specify a custom image. To do so, enter one of the following:

- The URL to a custom image.
- The fmap syntax to reference a custom image that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them".

**Note:** If you are working in a secured environment, then you must specify a custom image that is stored locally in the Oracle Business Intelligence environment using the fmap syntax. (A secured environment is one in which the HardenXSS element is set to true in the instanceconfig.xml file. See your administrator for more information.)

The custom image should be one that is accessible to all users who will view or edit the scorecard.

## **Update Preview**

Use this button to display the image in the **Preview** area.

## **Preview**

Displays the custom image.

# Replace Icon dialog: Standard Images tab

Use this tab of the "Replace Icon dialog" to select a standard image to use as the icon to represent an assessment range. Also use this dialog to select an image to display for a range of data on a map. You display this dialog from the "Image (Layer) dialog".

This tab is also displayed as:

Select Image dialog

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "Settings dialog: Assessment Mappings tab"
- "Editing Map Views"

# Components

# Image Categories (left pane)

Displays the categories of images. Click a category to display the available images in the right pane. The bottom-most category, which is marked by a globe icon, indicates the list of images that you imported on the Image Library tab of the "Administration: Manage Map Data page".

# Standard Images (right pane)

Displays the standard images that are available for the category that you selected in the left pane. Click the image that you want.

If you need to add an image, then see the administrator.

# **Report Links dialog**

Use this dialog to specify the links that are to be displayed with analyses on a dashboard page. You can specify these link setting at the following levels:

- Dashboard level The link settings apply to all analyses in the dashboard, unless customized settings have been specified for an individual dashboard page or analysis.
  - To specify the report links at the dashboard level, click the **Tools** button on the "Dashboard builder" toolbar to display the "Dashboard Properties dialog" and then click the **Dashboard Report Links Edit** button.
- Dashboard page level The link settings apply to all analyses in the dashboard page, unless customized settings have been specified for particular analyses.
  - To specify the report links at the dashboard level page, click the **Tools** button on the Dashboard builder toolbar and then select **Page Report Links**.
- Analysis level The link settings apply only to the particular analysis. To specify the report links at the analysis level, click the **Properties** button for the analysis in the "Page Layout area" of the Dashboard builder and select Report

For more information, see:

Links.

- "Changing the Properties of a Dashboard and its Pages"
- "Changing the Properties of Objects Added to Dashboard Pages"

# Components

### **Inherit Dashboard Settings**

Select this option to specify that the link settings for the dashboard are to be used.

This option is available only when you are specifying the link settings at the dashboard page level.

For more information, see "Changing the Properties of a Dashboard and its Pages".

## Inherit Page Settings

Select this option to specify that the link settings for the dashboard page are to be used.

This option is available only when you are specifying the link settings at the analysis level.

#### Customize

Select this option to customize the link settings for a particular dashboard page or analysis.

This option is available only when you are specifying the link settings for a dashboard page or an analysis.

# Analyze

Select this option to specify that the **Analyze** link is to be displayed. This link displays the analysis in its current state (that is, with the current context, for example, with applied filters, prompts, and so on) in the "Analysis editor", where users can edit it.

For more information on editing an analysis, see "Editing Analyses".

#### Edit

Select this option to specify that the **Edit** link is to be displayed. This link displays the analysis in its original state (that is, without the current context) in the "Analysis editor", where users can edit it.

For more information on editing an analysis, see "Editing Analyses".

### **Export**

Select this option to specify that the **Export** link is to be displayed. This link provides users with various options to export the results of the analysis, for example, Export 2003+. For more information on the available export options, see "Export Menu Options for Views and Results".

For more information on exporting an analysis, see "Exporting Results".

#### Refresh

Select this option to specify that the **Refresh** link is to be displayed. This link allows users to refresh the analysis.

### Add to Briefing Book

Select this option to specify that the **Add to Briefing Book** link is to be displayed. This link displays the "Save Briefing Book Content dialog", where users can add the analysis to a briefing book.

For more information about adding an analysis to a briefing book, see "Adding Content to New or Existing Briefing Books".

# **Print**

Select this option to specify that the **Print** link is to be displayed. This link provides users with the following print options:

- **HTML** Displays a printer-friendly version of the analysis in HTML
- **PDF** Displays a printer-friendly version of the analysis in Adobe PDF (Portable Document Format)

#### Copy

Select this option to specify that the **Copy** link is to be displayed. This link allows users to copy the analysis in its current state (that is, with the current context, for example, with applied filters, prompts, and so on) to Microsoft Office applications.

For more information about copying analyses to Microsoft Office applications, see "Copying Results to Microsoft Applications".

# Related Topics

"Dashboard Properties dialog"

# Results tab: Column Selector editor

Use this editor of the "Analysis editor: Results tab" to edit a column selector view. A column selector is a set of drop-down lists that contain pre-selected columns. Users can dynamically select columns and change the data that is displayed in the views of the analysis.

For more information, see "Editing Column Selector Views".

# Components

#### Include Selector

Use this box to specify whether a drop-down list is to be displayed for the column that contains this box.

#### Label

Use this field to enter a label for this column in the selector.

#### **Choices**

Displays the columns that are to be displayed as the choices in the drop-down list for the column. To add a new column to a drop-down list, ensure that the column to which you want to add a new column is active by clicking it to highlight it. Then double-click the new column that you want to add in the "Subject Areas pane".

### **Column Properties**

Use this button to display the "Column Properties dialog" for the column.

#### **Edit Formula**

Use this button to display the "Edit Column Formula dialog" for the column.

#### **Delete**

Use this button to delete the column from the drop-down list.

### **Clear Choices**

Use this link to clear all the columns that are selected to be displayed in the drop-down list, with the exception of the first column that was selected for the analysis.

# **Toolbar**

The toolbar contains the following buttons and boxes:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- **Label Position** Use this box to select a position for the label of each drop-down list, either Left or Above.
- **Automatically refresh when a new column is selected** Automatically refreshes the drop-down list of columns in the editor when you add a column from the Subject Areas pane.

### **Done**

Use this button to save your edits and return to the compound layout view.

# Revert

# **Results tab: Create Segment editor**

The editor is for users of the Oracle Siebel Marketing operational application, Version 7.7 (or higher), integrated with Oracle Business Intelligence.

Use this editor of the "Analysis editor: Results tab" to edit a create segment view, which displays a Create Segment link in the results. Users can click this link to create a segment in their Oracle Siebel Marketing operational application, based on the results data.

For more information, see:

- "Editing Views"
- The online help for the Marketing Segmentation interface

# Components

### **Display Results**

Use this box to specify whether to show the view results in the editor.

### **Toolbar**

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".

#### **Done**

Use this button to save your edits and return to the compound layout view.

#### Revert

# **Results tab: Create Target List editor**

This editor is for users of Oracle's Siebel Life Sciences application integrated with Oracle's Siebel Life Sciences Analytics applications.

Use this editor of the "Analysis editor: Results tab" to edit a create target list view, which allows automatic integration of lists of contacts and accounts based on the results of an analysis. For example, you can create a target list in Oracle's Siebel Pharma Sales application and use it in Oracle's Siebel Pharma Mobile Analytics application.

When you add a create target list view, a link named Create Target List is displayed in an analysis on a user's interactive dashboard. The user can click this link to populate or refresh a list of contacts or accounts in the Life Sciences application.

For more information, see:

- "Editing Views"
- The documentation for the Siebel Life Sciences application

# Components

# **Create Target List**

Use this link to create a target list.

#### **Toolbar**

The toolbar contains the following buttons and box:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- **Display Results** Use this box to specify whether to show the view results in the editor.

Use this button to save your edits and return to the compound layout view.

#### Revert

# Results tab: Data View editor

Use this editor of the "Analysis editor: Results tab" to edit one of the following data views:

- Funnel
- Gauge
- Graph
- Map
- Pivot table
- **Table**

For more information, see:

- "Editing Views"
- "Editing Gauge Views"
- "Editing Graph Views"
- "Editing Map Views"
- "Editing Table and Pivot Table Views"

This editor is displayed as:

Results tab: Funnel editor Results tab: Gauge editor Results tab: Graph editor Results tab: Map editor Results tab: Pivot Table editor Results tab: Table editor

# Components

# **Subject Areas**

Use the "Subject Areas pane" to select the columns for an analysis and to work with subject areas.

### **Analysis Results**

Displays the analysis results in a graph, funnel graph, gauge, map, pivot table, or table, depending on the type of view.

#### Layout

Use the "Layout pane" to specify the layout of the data for the view. This pane is not available for maps.

### Catalog

Use the "Catalog pane" to drag and drop objects from the Oracle BI Presentation Catalog that you want to add to the view.

## **Selection Steps**

This pane is available only in the Graph, Map, Pivot Table, and Table editors.

Use the "Selection Steps pane" to create and modify steps for data selections. This pane is not visible until you click the button to display it.

### Settings

This pane is available only in the Funnel and Gauge editors.

Use the "Settings pane" to set the thresholds for a funnel graph or gauge.

#### **Toolbar**

The toolbar contains buttons that are common to all view and buttons that depend on the type of data view. For more information on the buttons common to all views, see "Toolbar Buttons Common to All Views". For more information on specific data view buttons, see "Data View Editor Toolbar".

#### Done

Use this button to save your edits and return to the compound layout view.

#### Revert

Use this button to restore the settings in effect prior to your edits.

### Right-Click Menu

When editing or working with tables and pivot tables, you can right-click a cell to display a menu of options. For information, see "Right-Click Menu for Tables and Pivot Tables".

### **Paging Buttons**

These buttons are available only when editing or working with tables and pivot tables.

When a table or pivot table includes a large number of rows, a set of buttons can be displayed under the view. You can use the following buttons to page through the rows in the view:

- First 25 Rows Displays the first 25 rows of data for the view. The number that is used for the First, Previous, and Next buttons is specified by the Rows per Page field in the "Table Properties dialog: Style tab".
- **Previous 25 Rows** Displays the previous 25 rows of data for the view.
- **Next 25 Rows** Displays the next 25 rows of data for the view.
- **Display maximum (500) rows per page** Allows you to display as many as the maximum number of rows per page at one time temporarily. The default is 500. The administrator can specify a different maximum value that is displayed on the tooltip for the button using the MaxVisibleRows element in the configuration file.

# **Components Specific to Map**

#### Map View Area

Use this area to interact with the components of the map such as the zoom controls, legend, and overview map.

# **Map Formats**

Use this area to work with the applicable formats for the map. Not all formats are available for all layer types. For example, point layers cannot have Color Fill formats. The map cannot display more than one non-point format at a time (at a single zoom

level) but can display multiple point formats simultaneously, if they do not share the same latitude and longitude location. If multiple graph formats are specified at the same geographic layer, then they will render on top of each other.

You can do the following:

- Click **View** then **View All Formats** to specify that all defined formats are listed in this area, or click View Visible Formats to specify that only those formats that are currently displayed on the map are listed in this area.
- Click **Add New Map Formats**, select a format type, then select a layer to display the appropriate dialog for defining that format. You can select an existing layer, or you can choose to create a custom point layer, which allows you to apply formats to points on the map based on the latitude and longitude.
  - When you add a format, it is displayed at the top of the list of formats, to ensure that you will see it on the map.
- Select Automatically create formats when drilling to specify whether to automatically create formats when you drill in a map. The formats that are added are listed in the Map Formats pane. For example, suppose you drill from Districts to Cities. Additional formats will be added for the Cities layer.
  - You can also specify this option in the "Map Properties dialog: Interaction tab". The option is updated in both places when you make a change in either place.
- Hover over a layer name in the list to display the following buttons for modifying the layer:
  - **Add New Map Formats** Displays a list of formats so that you can select the appropriate format to display the appropriate dialog for defining that format. The list contains only those formats that apply for the geometry of that layer. For example, bar graphs and pie graphs do not apply to point layers. After selecting a format, select the column to which it applies.
    - If you add a format but do not see it on the map, then ensure that the map is showing the appropriate zoom level.
  - **Delete** Removes the layer and all its formats from display on the map.
- Hover over a format name under a layer name in the list to display the following buttons for modifying the format:
  - **Up or Down** Reorders the format in the lists of formats. The order is important, because formats higher in the list overlay those formats that are lower in the list.
  - **Edit** Displays the dialog for modifying the format.
  - **Delete** Deletes the format.
- Click the box beside a format name to make the format visible or invisible on the
- You can re-order formats within a geographic layer (such as State).
- Work with thresholds whether section sliders are displayed or not. If the slider is not displayed, then you can display a map format dialog to manipulate the threshold values.

If no layers are specified in the map formats area, then click **New Map Format**. The map prompts you to import the geo-encoded columns for displaying a format for a particular geo-layer, if the columns are not already part of the analysis.

When you specify to create a map view, you will likely see at least one layer available in the Map Formats area. If no layer is available, then the New Map Format link is displayed.

Limits exist for how much data can be displayed for formats on a map view. As you work with formats, you might exceed the data limit. If you do so, then you will see a message that alerts you to the data limit and the fact that not all formatting can be displayed. Administrators control the limit with the MaxRecords configuration element. For information on setting this element, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

# Right-Click Menu for Tables and Pivot Tables

When editing or working with tables and pivot tables, you can right-click a cell to display a menu of the following options:

- **Expand** Available for hierarchical columns only. Displays the next level down in the hierarchy. For information, see "Drilling in Results".
- **Collapse all items for this column** Available for hierarchical columns only. Collapses all the values in the column up to the top level.
- **Collapse all items in view** Available for hierarchical columns only. Collapses all the values in all the hierarchical columns in the view up to the top level.
- **Sort** or **Sort Layer** Available for heading cells only. Displays a menu of sorting options. For information, see "Sorting Options Menu and Buttons".
- **Exclude column** Moves the column to the Excluded drop target. For information, see "Columns in the Excluded Drop Target".
- **Move** Displays a menu of the following options:
  - **Right** and **Left** Moves the column to the right or left of its current location.
  - **To Prompts** Moves the column to the Prompts drop-target.
  - **To Sections** Moves the column to the Sections drop-target.
  - **To Columns** Moves the column to the Columns drop-target.

# **Toolbar Buttons Common to All Views**

The following toolbar buttons are common to all views:

- **Print This Analysis** Use this button to print the analysis as HTML or PDF. For more information on printing, see "Printing Views".
- **Export This Analysis** Use this button to select an option for exporting the analysis. For information, see "Export Menu Options for Views and Results".
- Show how results will look on a Dashboard Use this button to preview how the edited view will look on a dashboard.
- **Duplicate View** Use this button to create a copy of the view that you are editing.
- Refresh the results of the current analysis Use this button to refresh the data that is displayed in the view.

# Data View Editor Toolbar

The toolbar on a data view editor contains some buttons that are common to all data views and other buttons and boxes that are particular to specific views. See the following sections:

- "Toolbar Buttons Common to All Views"
- "Toolbar Buttons Common to All Data Views"
- "Toolbar Buttons Specific to Graph and Funnel Graph Views"
- "Toolbar Buttons and Boxes Specific to Gauge Views"
- "Toolbar Buttons and Box Specific to Map Views"
- "Toolbar Buttons and Box Specific to Pivot Table or Table Views"

#### **Toolbar Buttons Common to All Data Views**

The following toolbar buttons are common to all data views:

- **New Group** Use this button to display the "New Group dialog", where you add a new group.
- New Calculated Item Use this button to display the "New Calculated Item dialog", where you add a new calculated item.
- Edit Graph Properties Use this button to display the properties dialog for the
- **Display Results** Use this button to specify whether to show the view's results in the editor.
- Show/Hide Layout Pane Use this button to specify whether to show the "Layout pane" for all data views except for map.
- Show/Hide Selection Steps Pane Use this button to specify whether to show the "Selection Steps pane".

#### Toolbar Buttons Specific to Graph and Funnel Graph Views

The toolbar contains the following buttons and boxes that are specific to a graph view:

- **Type** Use this button to select the subtype of graph. Options depend on the type of graph.
- Style Use this button to select the style for the graph. Options depend on the type of graph.
- **Effect** Use this button to select either a 2D effect or a 3D effect for the graph.

### **Toolbar Buttons and Boxes Specific to Gauge Views**

The toolbar contains the following buttons and boxes that are specific to a gauge view:

- **Show/Hide Settings Pane** Use this button to specify whether to show the "Settings pane".
- **Gauge Type** (Not available for funnel graphs.) Use this button to select the type of gauge. Options are: Dial, Horizontal Bar, Vertical Bar, and Bulb.
- **Effect** (Not available for all gauge types.) Use this box to select either a 2D effect or a 3D effect for the gauge.

Size — Use this box to specify the size of the gauge — Fit to Canvas, Small, Medium, Large or Custom.

If you select **Custom**, then you must complete the **Width** and **Height** fields, where you specify the width and height in pixels.

### **Toolbar Buttons and Box Specific to Map Views**

The toolbar contains the following buttons and box that are specific to a map view:

- **Background Map** Use this box to select the background map for the map view.
- Pan Click this button and click and drag to move the map either side to side or up and down so that you see a certain portion of it. When you can pan, the cursor is in the shape of a hand and you can move the map in various directions.
- **Zoom In** and **Zoom Out** Click these buttons to zoom in and out of the map. When you can zoom in or out, the insertion point is in the shape of a magnifying glass with a plus or minus button over the glass.
- **Legend** Use this button to display or hide the legend for the map.

See "Working with Map Views on Dashboard Pages" for more information.

# Toolbar Buttons and Box Specific to Pivot Table or Table Views

The toolbar contains the following buttons and box that are specific to a pivot table or table view:

- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".
- **Graph Pivoted Results** Available only for pivot tables. Click this button to display the results of the pivot table in a graph view, which is displayed alongside the pivot table. The two views are fully linked, which means that changes made to one view are automatically reflected in the other.

The following items are added to the toolbar:

- **Position** Use this box to select the location of the graph relative to the pivot table that you created. Options are: **Right**, **Below**, **Above**, **Left**, **Graph Only**.
- Edit Graph Properties Use this button to display the "Graph Properties dialog".
- **Available Graph Types** Use this option to select the type of graph. Options include: Bar, Line, Area, Pie, Line-Bar, Time Series Line, Pareto, and Radar.
- **Type** (Not available for all graph types.) Use this box to select the subtype of graph. Options depend on the type of graph.
- **Style** (Not available for all graph types.) Use this box to select the style for the graph. Options depend on the type of graph.
- **Effect** (Not available for all graph types.) Use this box to select either a 2D effect or a 3D effect for the graph.

For information on available graph subtypes and styles, see Table 3–2.

# **Export Menu Options for Views and Results**

You can use the following options to export the results of an analysis or a view. When you export the results of an analysis, any tables, pivot tables, or graphs that are displayed with the analysis are included.

For more information, see "Exporting Results".

- PDF Displays the File Download dialog where you can open or save the results or view as a PDF file.
- Excel 2003+ Displays the File Download dialog where you can open or save the results or view as an XLS file. The file is saved in HTML format. Excel controls the positioning of the HTML.
- Powerpoint 2003+ Displays the File Download dialog where you can open or save the results or view as a PPT file.
- Web Archive (.mht) Displays the File Download dialog where you can open or save the results or view as an MHT file. This enables you to export the underlying data for an existing analysis or view as a Web page (MHTML) file.
- **Data** Displays these options for exporting the data from the results or view:
  - **CSV Format** Displays the File Download dialog where you can open or save all the columns in the results or view as a CSV file. This export results in a comma-separated list of values in a file that you can open in an application such as Excel.
  - **Tab delimited Format** Displays the File Download dialog where you can open or save all the columns in the results or view as a CSV file. This export results in a tab-separated list of values in a file that you can open in an application such as Excel.
  - **XML Format** Displays the File Download dialog where you can open or save the results or view as a TXT file. This file using the Microsoft MD Data Set standard for representing data in XML format.

# **Sorting Options Menu and Buttons**

You can use one of the following mechanisms to sort values in columns:

- Right-click in the column header of pivot tables and tables to display the following list of options for sorting the columns. In the "Selected Columns pane", click the Options button. You can also right-click to display the "Right-Click Menu for Tables and Pivot Tables" where you can select options for sorting.
  - **Sort Ascending** Sorts the values in the column by ascending order, as a first-level sort. For example, string values sort alphabetically A through Z, numbers sort lowest to highest, and dates sort earliest to latest. In the Selected Columns pane, when you select this option as the first sort, a **Sort** button is displayed to the left of the column name in the Selected Columns pane. If you later add another sort, then the **Sort** button includes the number 1.
  - **Sort Descending** Sorts the values in the column by descending order, as a first-level sort. In the Selected Columns pane, when you select this option as the first sort, a **Sort** button is displayed to the left of the column name in the Selected Columns pane. If you later add another sort, then the **Sort** button includes the number 1.
  - **Add Ascending Sort** Specifies that an ascending sort for this column is added as another sort for the analysis. In the Selected Columns pane, when you select this option, a **Sort** button with a number such as 2 or 3 is displayed to the left of the column name in the Selected Columns pane.
  - **Add Descending Sort** Specifies that an descending sort for this column is added as another sort for the analysis. In the Selected Columns pane, when you select this option, a **Sort** button with a number such as 2 or 3 is displayed to the left of the column name in the Selected Columns pane.
  - **Clear Sort** Removes the sort specification for the specified column. This option works differently in the Selected Columns pane than in other places. If you make sort specifications in both the Selected Columns pane and in the view itself, then you return to the Selected Columns pane and click Clear Sort, only the sort that you specified in the Selected Columns pane is removed. A sort that you specified in the view remains.
  - Clear Sorts in All Columns or Clear All Sorts in View Removes all sort specifications that you have made. The Clear Sorts in All Columns option works differently in the Selected Columns pane than in other places. If you make sort specifications in both the Selected Columns pane and in the view itself, then you return to the Selected Columns pane and click Clear Sorts for All Columns, only the sorts that you specified in the Selected Columns pane are removed. Sorts that you specified in the view remain.
- Hover the mouse pointer over the area to the right of the column name in the header of a pivot table or table and click either the upward facing triangle (Sort **Ascending**) or the downward facing triangle (**Sort Descending**) for that column. These sort specifications override those that you make with the right-click menu. Hovering is not available in the Selected Columns pane.
  - If you see a shaded-in sort button in the column header or the row header, then you know that the column contains a primary sort. You can add a second-level or third-level sort by hovering over another innermost column header or row header and clicking the appropriate sort button.

These options are also available in the "Results tab: Data View editor", the "Results tab: Table editor", and in views on dashboards. The Sort Ascending and Sort Descending triangles are not available in the Selected Columns pane or the Layout pane.

For more information, see "Sorting Data in Views".

# Results tab: Filters editor

Use this editor of the "Analysis editor: Results tab" to view the filters in effect for an analysis.

For more information, see "Editing Views".

# Components

# **Display Results**

Use this box to specify whether to show the view results in the editor.

#### **Toolbar**

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".

#### **Done**

Use this button to save your edits and return to the compound layout view.

### Revert

Use this button to restore the settings in effect prior to your edits.

#### Notes

If the column that is used in the filter is a display column, then the filter view shows display values rather than code values, unless the display values cannot be found. Then code values are displayed. For more information on display and code columns, see "Understanding the Double Column Feature".

# Results tab: Legend editor

Use this editor of the "Analysis editor: Results tab" to edit a legend view, which documents the meaning of special formatting used in an analysis, such as the meaning of custom colors applied to gauges. Legends are displayed in HTML and PDF output, and can be localized.

For example, suppose you use conditional formatting in an analysis to show critical items in the color red and items that need attention in the color yellow. You can add a legend with text that documents the meaning of the colors and captions that summarize the appropriate action. You can use cosmetic formatting to make the background colors of the text match the colors in the conditional analysis.

Each legend item consists of a legend symbol with sample text (for example, a red box that displays Critical) and a caption that documents the meaning of the legend symbol (for example, Requires Immediate Attention.

For more information, see "Editing Legend Views".

# Components

#### **Title**

Use this field to enter a title for the legend.

#### **Format Title**

Use this button to display the "Format Title dialog", where you format the title.

#### Caption

Use this field to enter, for each legend item, the meaning of the legend symbol, such as Requires Immediate Attention.

#### **Format Caption**

Use this button to display the "Format Caption dialog", where you format the caption.

## Sample Text

Use this field to enter, for each legend item, the text that is to be displayed within the legend symbol, for example, Critical.

#### **Format Text**

Use this button to display the "Format Text dialog", where you format the caption text.

# Move Down and Move Up

Use these buttons to reorder captions by moving them up or down one row in the list. Available only when you have more than one caption.

#### Delete

Use this button to delete a caption.

#### Add Caption

Use this button to add another caption.

#### Toolbar

The toolbar contains the following buttons and boxes:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- Format Legend View Use this button to display the "Format Legend View dialog", where you format the legend.
- **Captions** Use this box to select a position for the caption relative to the legend symbol — **Right**, **Left**, or **None**.
- **Legend items per row** Use this box to specify the number of legend items to display in a row.
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".

#### **Done**

Use this button to save your edits and return to the compound layout view.

#### Revert

# Results tab: Narrative editor

Use this editor of the "Analysis editor: Results tab" to add one or more paragraphs of text to be displayed with the results. Narrative text is useful for providing information such as context, explanatory text, or extended descriptions along with column values. You can perform the following actions in the narrative view:

- Type a sentence with placeholders for each column in the results.
- Specify how rows should be separated.
- Use HTML formatting buttons to make text bold, italic, or underlined, and insert line breaks.
- Apply cosmetic formatting to the fonts used in the narrative view, or import the font formatting from a previously saved view.
- Add references to variables.

For example, suppose that you have created an analysis that shows a user's sales by region and want to provide explanatory text with the analysis. Using a narrative view, you can create the following explanatory text:

```
This report shows your sales by region. The regions are:
East Region
West Region
```

For more information, see "Editing Narrative Views".

# Components

# **Bold, Italic, Underline**

Use these buttons to insert the HTML tags to begin and end bold, italic, or underlined text in the **Prefix**, **Narrative**, or **Postfix** fields.

#### Line Break

Use this button to insert a line break in the **Prefix**, **Narrative**, or **Postfix** fields.

**Note:** Pressing Enter does not result in multiple lines of text in the **Prefix**, **Narrative**, or **Postfix** fields.

#### Contains HTML Markup

Use this option to work with HTML codes, as described in "Working with HTML Markup".

#### **Prefix**

Use this field to enter the header for the narrative. This text is displayed at the beginning of the narrative.

For example, the following prefix entry:

[b] This analysis shows your sales by region. The regions are: [/b] [br/] [br/]

Displays this text:

This analysis shows your sales by region. The regions are:

#### Narrative

Use this field to enter the narrative text that will be displayed for each row in the results. You can include both text and column values. Include a line break code at the end of this field to force each line of text and values onto its own line.

To include values, use the at sign (@), as described in the following list:

- Use an at sign by itself to indicate the first column. If you include multiple at signs, then the first occurrence of the sign corresponds to the first column, the second occurrence corresponds to the second column, and so on.
- Use @n to include the results from the designated column in the narrative. For example, @1 inserts the results from the first column in the analysis, and @3 inserts the results of the third column.

For example, for an analysis that returns the region name in the second column, the following narrative entry:

@2

Displays this text:

East Region West Region

# **Row separator**

Use this field to enter a row separator for each line from the **Narrative** field that contains values. For example you might enter a string of plus signs (+) between each line.

#### Rows to display

Use this field to enter the number of rows from the column to return. For example, enter 5 to display values from the first 5 rows of the column. For a hierarchical column, you can use selection steps to display hierarchy levels with the hierarchical column. For example, create a step to select members based on hierarchy and add members of the specified level. A hierarchy level is considered a row.

### **Postfix**

Use this field to enter the footer text to be displayed at the bottom of the narrative. To display the footer information on a separate line from the actual narrative text, include markup tags in the **Postfix** field. Ensure that the narrative ends in a line break, or that the footer begins with a line break.

#### **Display Results**

Use this box to specify whether to show the view results in the editor.

#### **Toolbar**

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- Format Narrative View Use this button to display the "Format Narrative View dialog", where you format the view.
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns

and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".

#### Done

Use this button to save your edits and return to the compound layout view.

Use this button to restore the settings in effect prior to your edits.

### **Notes**

- You can reference variables in the Prefix, Narrative and Postfix fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".
- The following characters are reserved characters:
  - @ (at sign, unless used as a column placeholder in the Narrative field)
  - [ (left bracket)
  - ] (right bracket)
  - ' (single quote)
  - \ (backslash)

**Note:** If you want to include a reserved character, then precede it with a backslash character (\) to escape it. For example, to include a backslash character, type \\.

# Results tab: Static Text editor

Use this editor of the "Analysis editor: Results tab" to edit a static text view, which enables you to add or edit text to be displayed with the analysis results.

The markup can contain anything that is supported by the browser, but only formatting defined using the buttons at the top of the workspace will be displayed in PDF output.

For more information, see "Editing Views".

# Components

# **Bold, Italic, Underline**

Use these buttons to insert the HTML tags to begin and end bold, italic, or underlined text in the **Static Text** field.

#### Line Break

Use this button to insert a line break in the **Static Text** field.

**Note:** Pressing Enter does not result in multiple lines of text in the **Static Text** field.

### Contains HTML Markup

Use this option to work with HTML codes, as described in "Working with HTML Markup".

#### **Static Text**

Use this field to enter the text to be displayed with the analysis results.

For the syntax to use for variables, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

See the **Notes** section for some examples of static text.

#### Display Results

Use this box to specify whether to show the view results in the editor.

### **Toolbar**

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- Format Static Text View Use this button to display the "Format Static Text View dialog", where you format the view.
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".

### **Done**

Use this button to save your edits and return to the compound layout view.

# Revert

Use this button to restore the settings in effect prior to your edits.

# **Notes**

The following table lists and describes several static text view examples.

| Static Text View Example | Description and Usage Notes  |
|--------------------------|--|
| HTML text                | Paste or type the HTML (or appropriate formatted text) into the text box. You can also click the HTML tag buttons. Based on the format of the text that you are entering, you can use markup tags to control the format of the text. The following are some examples of what you can do: |
|                          | ■ To set font size and color:  |
|                          | <font color="red" size="4">Red Text</font>   |
|                          | ■ To combine tags for additional effects:  |
|                          | <pre><b><font color="red">Bold Red Text</font></b></pre>   |
| ActiveX object           | The Active-X object must be self-contained and supported by the browser. Paste or type the object into the HTML Text window, making sure to include the beginning and ending tags <object> and </object> .   |
| JavaScript or VBScript   | The script must be self-contained and supported by the browser. Paste or type the script into the text box, making sure to include the beginning and ending tags <script> and </script> .  |
| Audio                    | Ensure that you know where the audio clip is located. If the audio clip is for use in a shared environment, then it must be located on a network drive that accessible to all users.   |
|                          | Use the HTML tag <embed/> to add audio. The following format is an example format. Your browser might require a different format.  |
|                          | <pre><embed autostart="true" hidden="true" loop="true" src="audio"/></pre>   |
|                          | where "audio" is the location and name of the audio clip.  |
|                          | To add an audio clip located on the hard drive, the following HTML is an example:  |
|                          | <pre><embed autostart="true" hidden="true" loop="true" src="c:\mycomputer\MIDIfiles\wakeup.mid"/></pre>  |
|                          | To add the same audio clip from a shared location on the Web server, the following HTML is an example:   |
|                          | <pre><embed autostart="true" hidden="true" loop="true" src="\DashboardFiles\wakeup.mid"/></pre>  |

| Static Text View Example | Description and Usage Notes  |
|--------------------------|--|
| Background image         | The following example uses JavaScript.   |
|                          | Ensure that you know where the image to use as the background is located. If the image is for use in a shared environment, then it must be located on a network drive that is accessible to all users.                                   |
|                          | If the image is located in a shared dashboard files folder, then the following is example HTML:  |
|                          | <pre><script language="javascript"> document.body.background = "/dashboardfiles/"NameOfGraphic";</script></pre>  |
|                          | where NameOfGraphic is the name of the file to use, such as bricks.gif or sand.jpg.  |
| Variables                | The following example includes variables:  |
|                          | <pre>[u] Static Text View [/u][br/] Region: @{variables.myFavoriteRegion} - Year: @{variables.myFavoriteYear}[br/] System Time: @{system.currentTime}[dddd,MMMM dd,yyyy][br/] Product Version: @{system.productVersion}[br/] [br/]</pre> |

# Results tab: Ticker editor

Use this editor of the "Analysis editor: Results tab" to edit a ticker view, which displays the results of an analysis as a marquee (moving results that scroll across the page). You can customize the size of the scroll area, the speed and direction in which the results scroll, and other display settings.

**Note:** If the Web browser does not support moving text, then the results will be displayed, but they will not scroll across the page.

For more information, see "Editing Views".

# Components

#### **Behavior**

Use this box to select how the results move in the ticker:

- Slide— The results start hidden, scroll on to the page, then stop once touching the other side.
- Scroll The results start hidden, scroll on to the page, then off the page before repeating.
- **Alternate** The results bounce back and forward inside the marquee.

# **Direction**

Use this box to select the direction the results move in the ticker — **Left**, **Right**, **Down**, or **Up**.

#### Width

Use this field to enter the width of the ticker, either in pixels or as a percentage of the page width. For example, a value of 200 indicates a width of 200 pixels, and a value of 25% indicates a width of one-quarter of the page.

#### Height

Use this field to enter the height of the ticker, either in pixels or as a percentage of the page height.

### **Beginning Text**

Use this field to enter any optional text or graphics to display at the beginning of each redraw of the analysis results. You can use HTML to format the text.

If you include an image, then ensure you know where the image is located. If the image is for your use only, then the following is a sample location:

```
c:\mycomputer\temp\report.gif
```

If the image is for use in a shared environment, then it must be located on a network drive accessible to all users. For a shared image, specify the UNC name, for example:

```
\\ALLUSERS\graphics\report.gif
```

#### **Row Format**

Use this field to enter the HTML to use in formatting the rows in the results.

To include the results from a designated column, use @n. For example, @1 inserts the results from the first column, and @3 inserts the results of the third column.

### **Row Separator**

Use the field to enter the character that separates one row from another. The default character is a vertical bar ( | ).

# Column Separator

Use this field to enter the character that separates one column from another. The default character is a vertical bar ( | ).

# **Ending Text**

Use this field to enter any optional text or graphics to display at the end of each redraw of the analysis results. You can use HTML to format the text.

If you include an image, then ensure that you know where the image is located. If the image is for your use only, then the following is a sample location:

```
c:\mycomputer\temp\report.gif
```

If the image is for use in a shared environment, then it must be located on a network drive accessible to all users. For a shared image, specify the UNC name, for example:

```
\\ALLUSERS\graphics\report.gif
```

#### **Set Defaults**

Use this button to generate default settings for the most commonly used field.

**Note:** If you click **Set Defaults** after entering values in other fields, your entered values are cleared.

#### **Clear Fields**

Use this button to clear all fields.

**Note:** After you clear all fields, you can click **Set Defaults** to restore default settings for the most commonly used fields.

#### Advanced

Use this button to display the "Advanced Ticker Options dialog", where you specify additional options for the ticker, such as number of loops and background color.

#### Display Results

Use this box to specify whether to show the view results in the editor.

#### **Toolbar**

The toolbar contains the buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".

# Done

Use this button to save your edits and return to the compound layout view.

# Revert

# Results tab: Title editor

Use this editor of the "Analysis editor: Results tab" to edit a title view. You can add a title, a subtitle, a logo, a link to a custom help or other related information, and timestamps to the analysis.

For more information, see "Editing Views".

# Components

#### Title

Use this field to enter the text to display as the title. Do not include HTML markup.

If you do not specify a title, then the name of the saved analysis is used as the title. For unsaved analyses, the Title text box is blank.

#### **Format Title**

Use this button to display the "Format Title dialog", where you format the title.

# Display Saved Name

Use this box to specify whether to show the saved name of the analysis. Select the box to show the saved name. Deselect the box to hide it.

#### Logo

Use this field to specify a logo image or other graphic to display in the title. To do so, enter one of the following:

- The URL to a logo image or graphic.
- The fmap syntax to reference a logo image or graphic that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them".

**Note:** If you are working in a secured environment, then you must specify a logo image or graphic that is stored locally in the Oracle Business Intelligence environment using the fmap syntax. (A secured environment is one in which the HardenXSS element is set to true in the instanceconfig.xml file. See your administrator for more information.)

The image or graphic file should be one that is accessible to all users who will view the analysis.

### Format Logo

Use this button to display the "Format Logo dialog", where you format the logo.

#### Subtitle

Use this field to enter the text to display as a subtitle. The subtitle follows the title on a new line.

#### Format Subtitle

Use this button to display the "Format Subtitle dialog", where you format the subtitle.

#### Started Time

Use the box to specify whether to display a timestamp indicating when an analysis started to execute. You can specify the date, the time, the date and time, or no display.

#### **Format Time**

Use this button to display the "Format Time dialog", where you format the time for the analysis.

#### Help URL

Use this field to display a Help icon (that is, a question mark) that links to a custom help file or other related information in the title. To do so, enter one of the following:

- The URL to a custom help file or other related information.
- The fmap syntax to reference a custom help file or other related information that is stored locally in the Oracle Business Intelligence environment. For more information on the fmap syntax, see "Storing Custom Files Locally and Using the fmap Function to Reference Them".

**Note:** If you are working in a secured environment, then you must specify a customized help file or other related information that is stored locally in the Oracle Business Intelligence environment using the fmap syntax. (A secured environment is one in which the HardenXSS element is set to true in the instanceconfig.xml file. See your administrator for more information.)

The custom help file or other related information should be one that is accessible to all users who will view the analysis.

# **Format Value**

Use this button to display the "Format Title dialog", where you specify formatting for a view component.

#### Display Results

Use this box to specify whether to show the view results in the editor.

#### **Toolbar**

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- Format Title View Use this button to display the "Format Title View dialog", where you specify formatting for the view.
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".

#### **Done**

Use this button to save your edits and return to the compound layout view.

### Revert

Use this button to restore the settings in effect prior to your edits.

### **Notes**

- Titles and subtitles are formatted using the style sheet in use in your organization.
- You can reference variables in the Title, Logo, Subtitle and Help URL fields. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

# Storing Custom Files Locally and Using the fmap Function to Reference Them

You can store custom files, such as images and help files, locally in your Oracle Business Intelligence environment and then easily reference them using the fmap function. For example, you can store an image locally that you want to display in a title view. Then, when you specify the image for the title view in the "Results tab: Title editor", you can use the fmap function to reference it.

To store custom files locally, you must use the following directory and expose it according to the instructions for the HTTP Server that your organization uses:

# ORACLE

INSTANCE/bifoundation/OracleBIPresentationServicesComponent/coreapplication\_ obips1/analyticsRes directory.

**Note:** Because the analyticsRes directory gets replicated for every instance that is populated, the custom files need to be replicated in each instance.

You can store files directly in this directory or in subdirectories in this directory. It is strongly recommended that you use ASCII characters for names of custom files that you will reference using the fmap syntax.

**Note:** Custom files that were stored locally in previous releases of Oracle Business Intelligence will need to be manually migrated in Release 11g.

To easily reference custom files that are stored in the analyticsRes directory, use the following fmap syntax:

fmap:location/file name

#### where:

location/ is the subdirectory path in the analyticsRes directory in which the custom file resides, if the custom file resides in a subdirectory of analyticsRes (for example: Images/).

**Note:** Logo images and graphics located in the analyticsRes directory should all be stored in the same folder.

*file\_name* is the name of the custom file (for example: newlogo.gif).

The following are examples of fmap commands:

fmap:mylogo.gif fmap:Images/newlogo.gif

See Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence *Enterprise Edition* for more information on the fmap syntax.

# Results tab: View Selector editor

Use this editor of the "Analysis editor: Results tab" to edit a view selector view, which allows users to select a specific view of an analysis from among the saved views. For example, users can select to display a graph view for the analysis.

For more information, see "Editing View Selector Views".

# Components

#### Caption

Use this field to enter a caption for the view selector.

### **Format Caption**

Use this button to display the "Format Caption dialog", where you format the caption.

### **Caption Position**

Use this box to select a position for the caption — **Left**, **Above**, or **Right**.

#### **Available Views**

Displays the views that are available to be included as choices in the view selector. Select a view and click the right arrow to move it into the Views Included area.

**Note:** The None view shows the view selector only.

#### Views Included

Displays the views to be included as choices in the view selector. To change the order of the view in the list, select a view and use the up and down arrows. To rename a view, select the view and then click **Rename** to display the Rename dialog, where you enter a new name for the view. To remove a view from this area, select a view and click the left arrow.

#### **Toolbar**

The toolbar contains the following buttons:

- Buttons that are common to all views. For more information, see "Toolbar Buttons Common to All Views".
- **Import formatting from another analysis** Use this button to display the "Open dialog", where you select an analysis from which to import formatting for columns and views. For more information, see "Using a Saved Analysis to Modify the Cosmetic Appearance of Other Analyses".

#### **Done**

Use this button to save your edits and return to the compound layout view.

#### Revert

## Save Briefing Book Content dialog

Use this dialog to add content to a briefing book.

For more information, see:

- "What Are Briefing Books?"
- "Adding Content to New or Existing Briefing Books"

## Components

### Content Type

Use this area to select one of the following options:

- **Updatable** Refreshes the data whenever the briefing book is downloaded, or when it is specified as the delivery content for an agent.
- **Snapshot** Adds the content in its current state. Snapshot content preserves the original data and is not updated when the briefing book is rerun. Snapshot content will not be updated when using agents.

### **Follow Briefing Book Navigation Links**

This option applies only to updatable content, not to snapshot content.

Use this area to select one of the following options:

- **No** Specifies that briefing book navigation links are not to be followed.
- **Yes** Specifies that briefing book navigation links are to be followed. If you select this option, then you must also specify the number of links to follow.
- Number of links to follow Specifies the number of briefing book navigation links to be followed, if you selected the **Yes** option.

#### Description

Use this field to enter a description of the content being saved to the briefing book.

#### Location

Use this field to enter the briefing book in which to save the content. Click **Browse** to display the "Save As dialog", where you can select an existing briefing book or create a new briefing book by entering the new briefing book name in the **Name** field.

### Related Topics

```
"Editing Briefing Books"
"Downloading Briefing Books"
"Adding a List of Briefing Books to a Dashboard Page"
"Using Agents to Deliver Briefing Books"
```

## **Save Current Customization dialog**

Use this dialog to save a customization for a dashboard page.

For more information, see:

- "What Are Saved Customizations for Dashboard Pages?"
- "Saving Customizations"

## Components

#### Name

Use this field to enter a name for the saved customization.

#### Save For

Use this area to specify for whom the customization is to be saved. It contains the following components:

- **Me** Use this option to save the customization for your own personal use.
- **Others** Use this option to save the customization for use by others.
- **Set Permissions** Use this button to display the "Saved Customization Permissions and Defaults dialog", where you specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

#### Make this my default for this page

Use this option to specify whether to use this saved customization as your default customization when you display this page in a dashboard.

## **Saved Customization Permissions and Defaults dialog**

Use this dialog to specify the accounts that have permission to use the customization and whether the customization is to be the default customization for the accounts.

For more information, see:

- "Saving Customizations"
- "Save Current Customization dialog"
- "Edit Saved Customizations dialog"

## Components

#### **Permissions**

Displays the accounts that have permission to use the customization and indicates whether the customization is to be the default customization for the accounts.

To indicate that the customization is to be the default customization for an account, click the **Group Default** box for the account.

#### Add Users/Roles

Use this button to display the "Add Groups dialog", where you select the users, application roles, and Catalog groups to have permission to use a saved customization.

#### **Delete Selected Users/Roles**

Use this button to delete the selected account.

## Scale Markers dialog

Use this dialog to define scale markers for a graph.

Scale markers are accenting lines or shaded background ranges that mark key point, thresholds, ranges, and so on in a graph. There are two types of scale markers:

- **Line** A line that is drawn across the graph at a specified position on the scale
- **Range** A shaded background area that is displayed behind the graph

Line or range scale markers can be applied on one or more axes depending on the type of graph.

**Note:** Some graph types do not use scale markers, such as pie graphs.

For more information, see "Graph Properties dialog: Scale tab".

## Components

#### Click to add a new scale marker

Use this button to add a new scale marker row to the Scale Markers area.

#### Click to remove selected scale markers

Use this button to remove selected scale markers. To select a scale marker for removal, select the first box in the scale marker row.

#### **Scale Markers**

Use this table to define scale markers using the following components:

- **Caption** Use this column to enter the caption to be displayed in the legend for the scale marker.
- **Type** Use this box to specify the type of scale marker: **Line** or **Range**.
- Width (for a line) Use this column to select a width (in pixels) for the line.
- **Low** (for a range) Use this column to enter the low value of the range or click **Customize Scale Markers** to set the value.
- **Position** (for a line) Use this column to enter the position of the line or click **Customize Scale Markers** to set the value.
- **High** (for a range) Use this column to enter the high value of the range or click **Customize Scale Markers** to set the value.
- Customize Scale Markers Displays the "Customize Scale Marker dialog", where you set the value for the position of a line or the lower high values of a range. To set the value, you can use a static value, a presentation variable, a measure column, or a SQL query.
- **Color** Use this column to select the color of the scale marker.

## **Scorecard Breadth pane**

Use this pane to view pie graphs that show how evenly the objectives (and the KPIs that support them) that compose your scorecard are distributed among the following categories:

- Financial versus non-financial
- Internal versus external
- Leading versus lagging

These pie graphs are helpful to determine how balanced your scorecard is.

For more information, see:

- "What is Oracle Scorecard and Strategy Management?"
- "What is a Balanced Scorecard?"
- "Viewing Overview Information"

This pane is part of the "Scorecard editor: Overview tab".

## Components

#### **Financial versus Non-Financial Pie Graph**

Displays how many objectives are finance-specific and how many are not finance-specific. To maintain a balanced scorecard, financial and non-financial perspectives should be equally implemented.

#### **Internal versus External Pie Graph**

Displays how many objectives are specific to your internal corporate processes, and how many are related to external, customer-related objectives.

### Leading versus Lagging Pie Graph

Displays how many objectives drive the performance of other objectives (that is, how many are leading) and how many are affected by the performance of other objectives or by other data or processes (that is, how many are lagging).

# **Scorecard Content Properties dialog**

Use this dialog to specify how a scorecard object that you have added to a dashboard page is to be formatted.

For more information, see:

- "Adding Content to Dashboards"
- "Changing the Properties of Objects Added to Dashboard Pages"

## Components

#### Width

Use this field to enter the width of the object as a percentage of its original size.

### Height

Use this field to enter the height of the object in pixels.

## **Scorecard Documents pane**

Use this pane to create scorecard objects that present and analyze corporate strategy, such as vision and mission statements, strategy maps, cause & effect maps, and so on.

For more information, see

- "Defining Vision Statements"
- "Defining Mission Statements"
- "Creating Strategy Trees"
- "Creating Strategy Maps"
- "Creating Cause & Effect Maps"
- "Creating Custom Views"
- "What Are Key Performance Indicators (KPIs)?"
- "What Are KPI Watchlists?"
- "Creating an Agent From a KPI"

This pane is part of the "Scorecard editor".

## Components

#### **Object List**

Displays a list of objects that present and analyze corporate strategy.

#### Toolbar

- **Objects** Displays the following options:
  - Open Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)
  - **Cut** Use this option to remove the selected folder or object for pasting in another folder.
  - **Copy** Use this option to duplicate the selected folder or object and paste it in another folder.
  - **Paste** Use this option to paste the folder or object that you have cut or copied in another folder.
  - **Delete** Use this option to delete the selected folder or object.
- **View** Displays the option **System Objects**. Use this option to display system folders or objects in the object list. (System folders or objects are those for which the system attribute is set in the "Properties dialog").
- **New Object** Displays these options:
  - **Create New Folder** Use this option to create a new folder in which to organize objects. To rename the folder, right-click the folder and enter a new name.

- Create Cause & Effect Map Use this option to display the "Scorecard editor: Cause & Effect Map tab", where you create a cause & effect map.
- **Create Custom View** Use this option to display the "Scorecard editor: Custom View tab", where you create a custom view.
- **Create KPI** Use this option to display the "KPI editor", where you create a KPI.
- **Create Mission** Use this option to display the "Scorecard editor: Mission tab", where you define a mission statement.
- **Create Strategy Map** Use this option to display the "Scorecard editor: Strategy Map tab", where you create a strategy map.
- **Create Strategy Tree** Use this option to display the "Scorecard editor: Strategy Tree tab", where you create a strategy tree.
- **Create Vision** Use this option to display the "Scorecard editor: Vision tab", where you define a vision statement.
- Create KPI Watchlist Use this option to display the "Scorecard editor: KPI Watchlist tab", where you create a KPI watchlist.
- **Create Agent** (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog", where you create an agent from the KPI.
- **Open** Use this option to open the selected object. (Whether you can open an object and whether the object opens as read-only depends on your privileges and permissions and on the type of object.)
- **Delete** Use this option to delete the selected folder or object.
- **Refresh** Use this button to refresh the objects that are displayed in the object

## Scorecard editor

Use this editor to create a scorecard of your entire organization or of individual departments.

For more information, see:

- "What is Oracle Scorecard and Strategy Management?"
- "What is a Balanced Scorecard?"
- "What are Scorecard Objects?"
- "How Do I Create a Scorecard?"

## Components

#### Point of View

Displays dimensions of KPIs that are used in the Scorecard to measure the progress and performance of initiatives and objectives. Use this area to pin values for the dimensions. For more information, see "About the Point of View Area".

### Strategy

Use the "Strategy pane" to create, organize, and leverage the objectives that form the strategic structure, also called Strategy Tree, of the corporate entity (department, for example) that you want to evaluate using KPIs or to drive by initiatives.

#### Initiatives

Use the "Initiatives pane" to create, organize, and leverage the initiatives that are the tasks required to achieve objectives. You can monitor the progress of initiatives by assigning KPIs.

### **Scorecard Documents**

Use the "Scorecard Documents pane" to create diagrams and views that provide different depictions of strategy dynamics and structures (for example, cause & effect maps and strategy maps).

You can also use this pane to build custom maps to present scorecard data and define mission and vision statements that articulate the overarching goal of the entity that you are scorecarding such as your organization or department.

#### Catalog

Use the "Catalog pane" to locate and drag and drop objects from the catalog to build a scorecard. For example, you might select a predefined KPI and drag it to the objective or initiative whose progress it will measure.

#### **Perspectives**

Use the "Perspectives pane" to modify the default perspectives defined by the Balanced Scorecard Methodology, create custom perspectives, and delete perspectives.

#### Tab area

Displays tabs for the objects that you choose to view, create, or modify (for example, initiatives, strategy objectives, and strategy maps), including:

- "Scorecard editor: Overview tab"
- "Scorecard editor: Perspective tab"
- "Scorecard editor: Vision tab"
- "Scorecard editor: Mission tab"
- "Scorecard editor: Objective Details tab"
- "Scorecard editor: Initiative Details tab"
- "Scorecard editor: Strategy Map tab"
- "Scorecard editor: Strategy Tree tab"
- "Scorecard editor: Custom View tab"
- "Scorecard editor: Cause & Effect Map tab"
- "Scorecard editor: KPI Watchlist tab"
- "Scorecard editor: KPI Details tab"

#### **Toolbar**

- **Back** Use this button to go backward through your point of view history to to select a previous point of view. The (**Default Value**) option returns to the point of view with which you started.
- Forward Use this button to go forward through your point of view history to select a previous point of view.
- **Refresh KPI Values** Use this button to update the page to reflect changes.
- Scorecard Settings Use this button to display the "Settings dialog", where you define the score thresholds and assessment ranges to be used for scoring scorecard objects and edit dimension-related settings.
- Change Permissions on Scorecard Use this button to display the "Permission dialog", where you change the permissions of the scorecard.
- **Edit Mode Toggle** Use this button to toggle between these two modes:
  - Edit mode Enables you to create, modify, and delete all scorecard objects and views.
  - View mode —Enables you to fully navigate scorecard but not add new data, or modify and delete existing data.
- **Close Tab** Use this option to close the current tab.

## Scorecard editor: Cause & Effect Map tab

Use this tab of the "Scorecard editor" to create, view, and edit a cause & effect map.

For more information, see:

- "What Are Cause & Effect Maps?"
- "Creating Cause & Effect Maps"

## Components

#### Diagram

Use the "Cause & Effect Map tab: Diagram tab" to create a diagram that illustrates the cause and effect relationships among objectives and KPIs.

#### **Details**

Use the "Cause & Effect Map tab: Details tab" to specify supporting information for a cause & effect map.

#### **Toolbar**

- **Save** Use this button to save the cause & effect map.
- Save As Use this button to display the "Save As dialog", where you save the cause & effect map with another name.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the cause & effect map.
- **Zoom In** Use this button to enlarge the view of the diagram.
- **Zoom Out** Use this button to minimize the view of the diagram.
- Cause & Effect Map Preferences Use this button to display the "Cause & Effect Map Preferences dialog", where you specify how cause and effect relationships are to be displayed on a cause & effect map.

## Scorecard editor: Custom View tab

Use this tab of the "Scorecard editor" to create, view, and edit a custom view.

For more information, see:

- "What Are Custom Views?"
- "Creating Custom Views"

## Components

#### Diagram

Use the "Custom View tab: Diagram tab" to create a diagram that shows a personalized view of your business data.

#### **Details**

Use the "Custom View tab: Details tab" to specify supporting information for a custom view.

#### Toolbar

- **Save** Use this button to save the custom view.
- Save As Use this button to display the "Save As dialog", where you save the custom view with another name.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the custom view.
- **Zoom In** Use this button to enlarge the view of the diagram.
- **Zoom Out** Use this button to minimize the view of the diagram.
- **Properties** Use this button to display the "Custom View Properties dialog", where you specify a background image for the diagram.
- **Display As** Use the (Full, Simple, and *Property*) buttons to specify how you want each objective or KPI to be displayed on the diagram. For each objective or KPI, select it on the diagram and then:
  - Click **Full** to display the full version.
  - Click **Simple** to display the simple version.
  - Click *Property* to display it as one of its properties and then select one of these options:
    - Name Full name.
    - **Icon** The icon used to represent an objective or KPI.
    - **Status** Current performance status or level (Warning, for example).
    - **Trend** An icon indicating if the performance has improved or declined, is good or bad, or has remained the same since the previous comparison period. Only select this if trending is enabled for this node.
    - **Value** Current value.
    - **Target** The desired value.

- **Variance** Value by which the actual value differs from the target.
- % **Variance** Percent by which the actual value differs from the target.
- **Change** Value by which the actual value differs from that in a previous period.
- % Change Percent by which the actual value differs from that in a previous period.

## **Scorecard editor: Initiative Details tab**

Use this tab to create, view, and edit an initiative.

For more information, see:

- "What Are Initiatives?"
- "Creating Initiatives"

## Components

#### Name

Use this box to enter a new name for the initiative.

#### Description

Use this box to enter a description of the initiative.

#### **Status**

Displays the current performance status of the initiative, for example, Warning.

#### **Type**

Displays the type of object, that is, Initiative.

### **Analytics**

Use this "Analytics pane" to specify basic information about the initiative, to identify the KPIs and other objectives that support and measure the performance of the initiative, and to add action links.

#### Collaboration

Use the "Collaboration pane" to identify information helpful for collaborating on the initiative, including the business owner, key resources, and related documents.

#### **Related Items**

Use the "Related Items pane" to identify the objectives that drive the initiative.

#### **Toolbar**

- **Save** Use this button to save the initiative.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the initiative.

## Scorecard editor: KPI Details tab

Use this tab to work with KPI details, such as viewing basic KPI settings, pinning dimensions, specifying information helpful for collaborating on the KPI, and identifying related items.

For more information, see:

- "Working with KPI Details"
- "What Are KPIs?"

## Components

#### Name

Use this box to enter a new name for this use of the KPI.

#### Description

Use this box to enter a description of this KPI usage.

#### Status

Displays the current performance status of this KPI, for example, Warning.

#### **Trend**

Displays information that indicates how the performance of the selected KPI has changed since the last reporting period or a date that you specify.

Displays the type of object, that is, KPI.

#### **Analytics**

Use the "Analytics pane" to view basic KPI settings as well as a graph that presents actual values and target values, pin dimensions, and run actions.

#### Collaboration

Use the "Collaboration pane" to identify information helpful for collaborating on the the KPI, including the business owner, key resources, and related documents.

#### **Related Items**

Use the "Related Items pane" to identify the objectives that drive the KPI or are driven by the KPI.

#### **Toolbar**

- **Save** Use this button to save the KPI details.
- **Open KPI Definition** Use this button to open the KPI in the "KPI editor", where you can edit it.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the KPI.

## Scorecard editor: Mission tab

Use this tab of the "Scorecard editor" to define, view, and edit a mission or vision statement for your organization.

For more information, see:

- "What Are Mission Statements?"
- "Defining Mission Statements"
- "What Are Vision Statements?"
- "Defining Vision Statements"

The tab is also displayed as:

Scorecard editor: Vision tab

## Components

#### **Document**

Use the "Mission tab: Document tab" or "Vision tab: Document tab" to enter and format your mission statement or vision statement.

#### **Details**

Use the "Mission tab: Details tab" or "Vision tab: Details tab" to specify supporting information for the mission or vision statement.

#### **Toolbar**

- **Save** Use this button to save the mission or vision statement.
- Save As Use this button to display the "Save As dialog", where you save the mission or vision statement with another name.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the mission or vision statement.

## Scorecard editor: Objective Details tab

Use this tab to create, view, and edit an objective.

For more information, see:

- "What Are Objectives?"
- "Creating Objectives"

## Components

#### Name

Use this box enter a new name for the objective.

### **Description**

Use this box to enter a description of the objective.

#### **Status**

Displays the current performance status of the objective, for example, Warning.

#### **Type**

Displays the type of object, that is, Objective.

### **Analytics**

Use this "Analytics pane" to specify basic information about the objective, to identify the KPIs and other objectives that support and measure the performance of the objective, and to add action links.

#### Collaboration

Use the "Collaboration pane" to identify information helpful for collaborating on the objective, including the business owner and related documents.

#### Related Items

Use the "Related Items pane" to identify other objectives that cause or effect the objective and initiatives that drive the objective.

#### **Toolbar**

- **Save** Use this button to save the objective.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the objective.

## Scorecard editor: Overview tab

Use this tab of the "Scorecard editor" to:

View summary information for an initiative, objective, or KPI.

The summary information displayed depends on which object you last selected in the "Initiatives pane" or the "Strategy pane":

If you last selected:

- An initiative or objective, then the basic settings for the initiative or objective are displayed (for example, status, business owner, and so on) as well as a status summary showing the number of KPIs and initiatives, or KPIs and objectives, that evaluate progress in each performance assessment range.
  - If there is at least one child or descendant objective, initiative, or KPI for a particular status value, the status name is a hyperlink that drills to a dynamically created list of the child or descendant objectives, initiatives, and KPIs.
- A KPI, then the basic settings for the KPI are displayed (for example, status, business owner, and so on) as well as performance data and a performance
- Link to information on how to get started with scorecarding.
- View pie graphs that show how the objectives that compose your scorecard are distributed.

For more information, see "Viewing Overview Information".

### Components

#### **Summary View**

Use the "Summary View pane" to view summary information about the selected initiative, objective, or KPI.

#### Getting Started

Use the "Getting Started pane" to learn how to use scorecard to drive and assess corporate performance, to link to the Oracle Business Intelligence glossary, and to link to information about how to create scorecards.

#### **Scorecard Breadth**

Use the "Scorecard Breadth pane" to view pie graphs that show how evenly the objectives (and the KPIs that support them) that compose your scorecard are distributed among the following categories:

- Financial versus non-financial
- Internal versus external
- Leading versus lagging

## Scorecard editor: Perspective tab

Use this tab to create, view and edit perspectives.

For more information, see:

- "What Are Perspectives?"
- "Creating Custom Perspectives"

## Components

#### Perspective Name

Use this field to enter the name of the perspective.

#### Description

Use this field to enter a description of the perspective.

#### **Business Owner**

Displays the userID of the person responsible for managing the perspective. To specify the business owner, click the **Set User** button to display the "Business Owner dialog", where you can search for and select the business owner.

#### **Focus**

Displays the following options to indicate the focus of the perspective:

- **Financial** Use this option to specify that the perspective focuses on objectives, initiatives, and KPIs that relate to or support the monetary or economic health and development of your organization.
- **Internal facing** Use this option to specify that the perspective focuses on objectives, initiatives, and KPIs that form internal processes and functions, for example, employee training programs.

#### **Objectives, Initiatives & KPIs**

Use this table to view and manage the initiatives, objectives, and KPIs that are associated with this perspective.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

#### **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the perspective.

#### **Toolbar**

- **Save** Use this button to save the perspective.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the perspective.

## Scorecard editor: Strategy Map tab

Use this tab of the "Scorecard editor" to create, view, and edit a strategy map.

For more information, see:

- "What Are Strategy Maps?"
- "Creating Strategy Maps"

## Components

#### Diagram

Use the "Strategy Map tab: Diagram tab" to create a diagram that shows how the objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives.

#### **Details**

Use the "Strategy Map tab: Details tab" to specify supporting information for the strategy map.

#### Toolbar

This toolbar contains the following buttons:

- **Save** Use this button to save the strategy map.
- Save As Use this button to display the "Save As dialog", where you save the strategy map with another name.
- **Contact Owner** Use this button to display the "Contact Owner dialog", where you can contact the business owner of the strategy map.
- **Zoom In** Use this button to enlarge the view of the diagram.
- **Zoom Out** Use this button to minimize the view of the diagram.
- **Draw a Causal Linkage Between Two Objectives** Use this button to add a cause and effect relationship between two objectives, two KPIs, or between an objective and a KPI.

To do so, click this button, select the objective or KPI that is the cause (that is the objective or KPI that drives the second objective or KPI), and then drag to and select the objective or KPI that is the effect (that is, the objective or KPI that is driven by the first objective or KPI.) Click the button again to turn this functionality off. A line is drawn on the diagram connecting the two objectives, two KPIs, or the objective and KPI. The two objectives, two KPIs, or the objective and KPI are added to the Causes and Effects tables on the "Scorecard editor: Objective Details tab" accordingly.

## Scorecard editor: Strategy Tree tab

Use this tab of the "Scorecard editor" to create, view, and edit a strategy tree.

For more information, see:

- "What Are Strategy Trees?"
- "Creating Strategy Trees"

## Components

#### Diagram

Use the "Strategy Tree tab: Diagram tab" to view an objective and its supporting child objectives and KPIs hierarchically in a tree diagram.

#### **Details**

Use the "Strategy Tree tab: Details tab" to specify supporting information for the strategy tree.

#### **Toolbar**

- **Save** Use this button to save the strategy tree.
- Save As Use this button to display the "Save As dialog", where you save the strategy tree with another name.
- Contact Owner Use this button to display the "Contact Owner dialog", where you can contact the business owner of the strategy tree.
- **Zoom In** Use this button to enlarge the view of the diagram.
- **Zoom Out** Use this button to minimize the view of the diagram.

## Search pane

Use this pane to find objects by name, directory location, and type (agents and scorecards, for example). This pane enables you to quickly locate the objects that you

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Searching with the Basic Search"

This pane is part of the "Catalog page".

## Components

#### Name

Use this field to enter the full or partial name of the object or folder that you want to find. In addition to text, you can use the following:

- \\ Search for an exact match
- \* Search for all objects of a specific type. For example, \*reports will return all reports

#### Location

Use this list to select a folder in which to search for objects:

- **My Folders** Search folders that you created or that were automatically generated for you.
- **Shared Folders** Search all folders that you can access.

Administrators can search for all user and object folders in the catalog root directory.

#### Type

Use this list to find only certain kinds of objects. For example, reports, dashboards, or KPIs.

## **Section Condition dialog**

Use this dialog to specify the condition to be used to determine whether a section in a dashboard is to be displayed.

You might want to display a section conditionally, for example, when the results of an analysis show that sales are down by 15 percent or greater in the past week and you want to display a section that contains links to related reports.

This dialog is displayed from the "Page Layout area" in the "Dashboard builder".

For more information, see "Changing the Properties of Objects Added to Dashboard Pages".

## Components

#### Condition

Displays the condition under which the section is to be displayed.

#### **New Condition**

Use this button to display the "New Condition dialog", where you create a new condition.

### **Select Condition**

Use this button to display the "Select Condition dialog", where you select an existing condition.

#### More (>>)

Display these options:

- **Test Condition** Use this button to test whether the condition evaluates to true or false.
- **Edit Condition** Use this button to display the "Edit Condition dialog", where you edit the condition.
- **Remove Condition** Use this button to remove the condition.
- Save Condition As Use this button to display the "Save As dialog", where you save the condition by name to the catalog.

## **Section Properties dialog**

Use this dialog to specify the properties for a section of data in a view via the Layout pane.

For more information, see "Setting Properties for View Bodies and Drop Targets".

### Components for Pivot Tables and Tables

#### **Insert Page Break**

Use this area to indicate whether to create a page break before the section, so that every time a value changes in the section drop target, the new section for that column is displayed on a new page. Page breaks are visible when you export an analysis to PDF. This is useful for data-driven detail analyses.

You can select from the following:

- **No Page Break** Do not break pages.
- **Innermost Column** Break at the innermost column, which inserts a page break between every section.
- **Outermost Column** Break at the outermost column, which inserts a page break when the section label in the outermost column changes.
  - When the value of an outermost column changes, the value of the inner column is also considered changed. Therefore, setting page breaks at the innermost column inserts manual page breaks between every section.
- Folder.Column For example, Markets.Region, or Products.Brand. Inserts a page break when the section label in the specified column changes. This option is available only when the Sections drop target contains a column.

#### **Show Blank Rows**

Use this box to indicate whether to display rows that have no data in the section. Select the box to display all rows, even if a row is an empty text string and contains no value. Deselect the box to hide rows when there are no results to display. This option might be useful for example, if you want to hide empty address lines.

### **Display Heading**

Use this box to indicate whether to display the heading for the section.

The remaining components of this dialog are described in "Column Properties dialog: Style tab".

## Components for Graphs

#### Maximum number of section slider values

Use this box to enter the maximum number of values to display on a section slider bar, but not to exceed the system maximum. The administrator configures the system maximum. If you enter a number that exceeds the system maximum, then it will be ignored.

For more information about section sliders, see "Defining Section Sliders in Graphs and Gauges".

## Select Column dialog

Use this dialog to navigate to and select the columns or members that you want to include in an analysis, prompt, filter, KPI, or when associating columns with layers for maps. In some cases, you can also use this dialog to add additional subject areas to the dialog.

For more information, see:

- "What Are Subject Areas and Columns?"
- "Creating or Editing a Column Prompt"
- "Editing Map Views"

This dialog is also displayed as:

Add Columns dialog Select BI Key Columns dialog Select Columns dialog Select member in *Dimension* Hierarchy dialog

## Components

#### Add Related Subject Area

This button is available only if one or more related subject areas are available and you have permission to access them.

Use this button to display the "Add/Remove Subject Areas dialog", from which you can add or remove related subject areas.

#### Search

Not available for maps. Click this button to search.

#### Subject Area

Use this tree to browse for and select the column for which you want to build the prompt, the column that you want to add to the filter, the dimension that you want to add to the KPI, or the column that you want to associate with a layer for a map. For a map, you can select a single column, multiple columns from multiple subject areas, or multiple columns from a single subject area.

#### Selected Columns

This area is available only for columns to associate with a layer for a map. You can view and modify the columns that you have selected.

#### Shuttle

These buttons are available only for columns to associate with a layer for a map. You can select columns in one or more subject areas and move them between the two lists in the dialog.

#### Reorder

These buttons are available only for columns to associate with a layer for a map. You can select columns then click the buttons to modify the order or the columns in the list. If you are trying to duplicate the name of a geographic layer that has multiple parts, then ensure that the columns are in order from top to bottom to match that layer name.

For example, if the layer name is Country\_State, then ensure that you include the Country column above the State column in the list.

## **Related Topics**

"Definition pane" "Edit Layer dialog"

## **Select Java Method dialog**

Use this dialog to select one of the following items:

- For an Invoke a Java Method action, the Java method to be invoked
- For a Navigate to EPM Content action, the Hyperion resource to which to navigate For more information, see:
- "What Are Actions?"
- "What Action Types Are Available?"
- "Specifying the Settings for New Actions"

This dialog is also displayed as:

Select the Hyperion resource you want this action to invoke dialog

## Components

### EJB or Hyperion Resources

Displays the following:

- For an Invoke a Java Method action, Java methods that you can select
- For a Navigate to EPM Content action, the Hyperion resources that you can select Use this list to select a Java method or a Hyperion resource.

#### Selected

Displays the Java method or the Hyperion resource that you have selected in the list.

# **Select Script Function dialog**

Use this dialog to select the function to be executed by an Invoke a Browser Script action.

For more information, see:

- "What Are Actions?"
- "What Action Types Are Available?"
- "Specifying the Settings for New Actions"

## Components

#### **Function**

Use this list to select the function to be executed.

#### Name

Displays the name of the function selected in the list.

## **Select Values dialog**

Use this dialog to search for and select one or more values from a list of available values:

- In a filter or prompt, when performing write back on a table view or pivot table view, or when creating or editing a member step
- In a list of KPI dimensions, when pinning a dimension

Using this search function, you can limit the list of available values (for example, find all those values that start with the letter D) so that you can more easily find the value or values that you want.

This dialog is also displayed as:

Choose Members dialog Edit Hierarchy Selection Step dialog Edit Member Step dialog Edit Select Existing Groups and Calculated Items New Hierarchy Selection Step dialog New Select Members dialog New Select Existing Groups and Calculated Items Search Members dialog

## Components

**Note:** Not all components are available in each version of this dialog.

#### Relationship

Available only when working with a member step that is based on a hierarchy.

Use this box to select the type of relationship with which to create the member step for the hierarchical column. You can select a family relationship, a specific hierarchy level (for level-based hierarchies only), or a level relationship (for level-based hierarchies only). For parent-child hierarchies, the only option available is family relationship.

### Action

Available only when working with a member step.

Use this box to select the type of action to create for a member step. You can select to add the selected members to the selection, keep only the selected members and remove all others, or remove the selected members from the selection. For groups and calculated items, the only action available is Add.

When working with a member step that is based on a hierarchy, use the box beside the **Action** box to specify a hierarchy level (for level-based hierarchies only) or a family relationship (such as children of, parent of, descendants of, and ancestors of).

When you edit the first step in a list, the choices for actions are **Start with All** Members, Start with Selected Members, and Start with Groups or Calculated Items.

#### Search

Use this button to show or hide the Search area that is displayed within the Available List area. See "Components of Search Area".

#### Available List

Use this area to:

- Initiate a search in the Search area.
- Select values to move to the Selected List area.
- Show additional choices, if available, by clicking **More**.

Items that you have selected are displayed with a green check mark beside them.

#### **Selected List**

Use this area to view the values that you have selected from the Available List area and moved to the Selected List area.

#### **Edit**

Use this button to display the "Edit dialog", where you can refine the values with which you are working.

This button is not available when you select members for selection steps.

#### **Override with Prompt**

Use this box to specify that an analysis prompt or a dashboard prompt can override the member step. In a list of steps for a column, specify that only one step in the list be able to be overridden by a prompt. For information, see Chapter 6, "Prompting in Dashboards and Analyses."

#### Notes

- To select multiple values, press the Control key, then click the values.
- To select a range of values, click the first value in the range, press the Shift key, then click the last value in the range.
- To move one or more values from the Available List area to the Selected List area, use the Move or Move All button. You also can double-click a single value in the Available List area to move it to the Selected List area.

For a group, the following options are displayed when you click the arrow beside Move:

- **Add** Use this option to add the group to the analysis. You will see an "Add: group-name" step in the Selected List area. You will see an outline value for the group in a table or pivot table.
- **Add Members** Use this option to add the members of the group to the analysis. You will see an "Add: Members of group-name" step in the Selected List area. You will not see an outline value in a table or pivot table; you will see the members of the group.
- To remove one or more values from the Selected List area, use the **Remove** or **Remove All** button. You also can double-click a single value in the Selected List area to remove it.
- In the search criteria, you can use % (percent sign) as a wildcard.

### Components of Search Area

Use this area to initiate a search for values or members and view the results of the search.

#### Name

Use these fields to specify text data on which to search. In the **Name** box, select the appropriate option such as Starts, Contains, Ends, or Is Like (pattern match). Enter the string for which you need to search.

#### Between and

Not available for member search. Use this field to specify a range of numeric or date and time data for which to search.

#### Children of

Available only when searching for hierarchical members. Use this field to specify the node in whose sub-tree you want to start searching for members. For example, suppose that you have a geography hierarchy with All Countries as the root node and 50 countries below that. You want to search for all cities that start with the letter "A" in the country called USA. Use the **Children of** field to specify USA.

Select **Member** to display the Select Member dialog.

### Select a Specific Member to Search Within

Available only when searching for hierarchical members. Click this button to display the Select Member dialog in which you specify the member whose children you want to search.

#### At Level

Available only when searching for members of level-based hierarchies. Use this field to select the level below which you want to search for members. The default of <Any> specifies to search for members below any level. For parent-child hierarchies, no levels exist, so this setting is always <Any>. Certain levels are disabled because they are at or above the level you selected, which does not constitute a valid search.

#### Search

Use this button to initiate the search and display the search results. When you search for members, the columns of the subject area are searched.

#### **Notes**

If the available list of values for a prompt or write back column is based on a SQL statement, then you will not be able to search for values.

#### **Related Topics**

"New Prompt dialog"

## **Select Variable dialog**

Use this dialog to specify a variable to use to set a value of a KPI dimension. You set values of KPI dimensions, for example, when you add a KPI that is dimensioned to a KPI Watchlist or when you add a strategy map that contains one or more KPIs that are dimensioned to a dashboard.

For more information about variables, see "Using Variables".

## Components

#### Variable Type

Use this box to select the type of variable to use to set the value. Depending on the task you are performing, you can select one of these types: Session, Repository, or Presentation.

### **Variable Name**

Use this field to enter the name of the variable to use to set the value, for example USER.

## Select Web Service Operation dialog

Use this dialog to select the Web Service operation to be invoked by an Invoke a Web Service action.

For more information, see:

- "What Are Actions?"
- "What Action Types Are Available?"
- "Specifying the Settings for New Actions"

## Components

#### Web Services

Use this list to select the Web Service operation to invoke.

Initially, this list displays the Web Services pre-configured by the administrator. You can display other Web Services by using the WSDL URL component.

#### **WSDL URL**

Displays the Web Services Description Language (WSDL) of the Web Service operation selected in the Web Services list.

To list Web Service operations available from a WSDL URL that was not pre-configured, use this field to enter the WSDL URL (for example, http://<machine>:8888/default/10?WSDL) and then click **Open**.

### **Web Service**

Displays the Web Service of the selected operation.

#### Operation

Displays the selected operation.

### Restore the list of Web Services pre-configured by your Oracle BI Administrator

Use this button to display the list of Web Services that were initially displayed in the Web Services list, that is, the Web Services pre-configured by the administrator.

#### Refresh the selected folder

This button is available only when you have a folder selected. Use this button to refresh the selected folder.

## Selected Columns pane

Use this pane to view, add, and modify the criteria that are selected for an analysis.

Selected columns are displayed in boxes in this pane. Each box has two sections. The upper section shows the name of the column's folder, for example, Customers. The lower section shows the name of the column, for example, Customer Name. If columns from the same folder are placed next to each other, then they are grouped in one folder section.

If a column selector view is in use, then you see the phrase "Column Group" instead of the column name. You also cannot edit the properties for the columns. See "Editing Column Selector Views" for information.

#### You can:

- Reorder the columns to arrange them in the way that they are to be displayed in the analysis results
- Combine the results of two or more analyses into a single result
- Remove all columns from the criteria

Other modifications that you can make to columns depend on the type of column:

- For attribute columns and measure columns, you can:
  - Specify the sort order of the column
  - Edit the formula for the column, including customizing the heading
  - Edit column properties to control the formatting and interaction of the column
  - Add new filters
  - Delete column
- For hierarchical columns, you can:
  - Specify the sort order of the column
  - Edit column properties to control the formatting and interaction of the column
  - Delete column
- For hierarchy levels, you can:
  - Edit properties to control the formatting and interaction of the hierarchy level

For more information, see "Specifying the Criteria for Analyses".

This pane is part of the "Analysis editor: Criteria tab".

## Components

#### **Drag Column**

Use this button to reorder a single column or multiple columns that are grouped in a folder section. This button is located to the left of the column name or folder name. The following list describes how to use the **Drag Column** button, but you can reorder by clicking anywhere in the column or folder area and dragging and dropping to the new location. Valid drop locations are indicated by a thick solid line.

To reorder:

- A single column in a folder section that contains only one column, click the **Drag** Column button in either the column section or the folder section and drag and drop the section to a new location.
- A single column in a folder section that contains multiple columns, click the **Drag Column** button in the column section and then drag and drop the section to a new location. A new folder section is created for the reordered column.
- All columns in a folder section, click the **Drag Column** button in the folder section and drag and drop the section to a new location.

#### **Plus or Minus**

This button is available only for hierarchical columns.

Use this button to expand or collapse the display of hierarchy levels in column.

#### Options

Use this button to select one of the following options:

- **Sort** This option is available for attribute, measure, and hierarchical columns. It is not available for hierarchy levels. Displays options for sorting values. For information, see "Sorting Options Menu and Buttons".
- **Edit Formula** This option is available only for attribute columns and measure columns. Use this option to display the "Edit Column Formula dialog", where you can customize headings and edit the formula for the column, such as adding a Rank or Percentile function. For more information, see "Editing the Formula for a Column".
- Column Properties or Hierarchy Level Properties Use this option to display the "Column Properties dialog", where you can edit various format properties for the column or hierarchy level. For more information, see Chapter 7, "Formatting Analyses, Views, and Dashboard Pages."
- **Filter** This option is available only for attribute columns and measure columns. Use this option to display the "New Filter dialog", where you can create a filter for the attribute or measure column. For more information on filters, see Chapter 5, "Filtering and Selecting Data for Analyses."
- **Delete** This option is available for attribute, measure, and hierarchical columns. It is not available for hierarchy levels. Use this option to delete the column.

#### **Toolbar**

- Combine results based on union, intersection, and difference operations Use this button to combine columns from one or more subject areas using Set operations. The columns must have commonality in order to be combined.
  - Click the button to display the Select Subject Area menu, where you select a subject area that contains the data that you want to combine with the columns that you have already added. (The subject area can be the same as that from which you have already selected columns, or a different subject area.) The Set Operations area is displayed, where you can use the following components:
  - **Result Columns** and **Criteria "subject area"** links Click these links to display the appropriate columns in this pane. For example, suppose that you have selected the District and Dollar columns from the Paint subject area. If you click Criteria "subject area", then the District and Dollar columns are shown so that you can perform tasks such as formatting those columns. If you

have combined columns using Set operations, then click Result Columns to show those columns and perform tasks such as formatting them.

The result columns are those that are displayed in views after applying the set operation of the derived columns.

- **Union** button Displays the following options:
  - **Union** Use this option to specify that only nonduplicate rows from all columns are to be returned.
  - **Union All** Use this option to specify that rows from all columns, including duplicate rows, are to be returned.
  - **Intersect** Use this option to specify that only rows common to all columns are to be returned.
  - **Minus** Use this option to specify that only rows from the first column that are not in the second column are to be returned.
- More options button Click to cut, copy, or paste that subject area in the list of criteria.
- Edit button Click to display additional options for working with the subject areas:
  - Create New Criteria Displays the Select Subject Area menu, where you select a subject area to add to the criteria.
  - **Copy** and **Paste** Creates a duplicate set of criteria on which you can perform set operations.
  - **Cut** Removes the current set of criteria from the pane.
  - **Ungroup** If you have created a duplicate set of criteria, then this option is available to move the set of criteria to the next highest level.

For more information, see "Combining Columns Using Set Operations".

**Remove all columns from criteria** — Use this button to remove all columns that have been included in the Selected Columns pane. Be aware that there is no confirmation message and no undo available for this operation.

## Selection Steps pane

Use this pane to create and modify steps for selecting data. The steps in this pane apply to all views for the analysis. You do not have to display the editor for a particular view to edit its selection steps.

For more information, see "Working with Selections of Data".

This pane is part of the "Analysis editor: Criteria tab", the "Analysis editor: Results tab", and certain view editors. This pane is not visible on the Criteria tab until you click the toolbar button to display it. The contents of this pane are displayed slightly differently on the Criteria tab if a column selector view is in use. See "Editing Column Selector Views" for information.

### Components

#### List

Use to select the columns or measures to view in the pane. You can view all columns and measures, just measures, or specific columns.

### Column Area

Use to indicate the start of the list of steps for each column. For hierarchical columns, the name of the hierarchy is included with the column name. This area includes the following types of steps:

- Start With Serves as the starting selection for a column. This step is populated automatically when you select columns or hierarchy levels from a subject area.
  - For every column that you select, an implicit "Start with All Members" step is added for that column, where "All" implies all the members for the column after filters are applied.
  - For every hierarchy level that you select, an implicit "Start with all *level-name*" step is added for that level, where "All" implies all the members for the level after filters are applied. For example, if you select the Fiscal Quarter hierarchy level, then a step is created with a name such as "Start with All Fiscal Quarter".
- Add Adds the selected members to the selection.
- Keep only Keeps only the selected members and remove all others.
- Remove Removes the selected members from the selection.

### Save Selection Steps

Click this button to displays the "Save Selection Steps dialog" where you save the steps for the column or hierarchy level as a group. This button is available only when you have more than a single Start With step in the list for a column. This button is not available if you try to save a set of steps as a group and one of the steps includes a calculated item.

### Then, New Step

Click this link to display the following options:

Select Members — Displays the "New Select Members dialog" where you create a new step of the specified members.

- **Add Groups or Calculated Items** Displays a submenu with the following
  - **Select Existing Groups and Calculated Items** Displays the "New Select Existing Groups and Calculated Items" where you select an existing group or calculated item.
  - **New Group** Displays the "New Group dialog" where you add a new group.
  - New Calculated Item Displays the "New Calculated Item dialog" where you add a new calculated item.
- **Apply a Condition** Displays the "New Condition Step dialog", where you create a new condition step.
- Select Members Based on Hierarchy Displays the "New Hierarchy Selection Step dialog", which is available for hierarchical columns only.

### Name of Group or Calculated Item

Click the link for a group or calculated item to display one of the following dialogs: "Edit Group dialog" or "Edit Calculated Item dialog".

### **Selection Step Toolbar**

The selection step toolbar is the collection of buttons that displays when you hover over a selection step within the list of steps. It can include the following buttons:

- **Edit** Displays the dialog where you can edit the step. For a "Start with" step, this is the only button available.
- **Move Up** Moves this step one level up in the list of steps.
- **Move Down** Moves this step one level down in the list of steps.
- **Delete** Deletes this step from the list of steps.

## Set User dialog

Use this dialog to search for and select a user. For example, in a Scorecard, you use this dialog to select the user to assign as a business owner to Scorecard objects such as KPIs, initiatives, and strategy objectives. In an agent, you use this dialog to select the user whose credentials you want to use to send the delivery content.

For more information, see:

- "Agent editor: General tab"
- "Creating Initiatives"
- "Creating Objectives"
- "KPI Watchlist editor: Details tab"

This dialog is also displayed as:

Business Owner dialog Select Business Owner dialog Select User dialog Select Key Resource User dialog

### Components

### Name

Use this field to enter your search criteria. For example, enter the user's first name to display a list of users with that first name.

### Search

Use this button to display the accounts that satisfy the name search criteria that you entered.

### **Accounts**

Displays the list of accounts that satisfy the name search criteria that you entered. You can then select the name that you want.

## **Settings dialog**

Use this dialog to:

- Define the score thresholds and assessment ranges to be used for scoring scorecard objects
- Set up the controls for dimensions in the point of view area of a scorecard

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"
- "About the Point of View Area"

### Components

### **Assessment Mappings**

Use the "Settings dialog: Assessment Mappings tab" to define the score thresholds and assessment ranges to be used for scoring scorecard objects.

### **Dimension Settings**

Use the "Settings dialog: Dimension Settings tab" to set up the controls for dimensions in the point of view area of a scorecard.

## **Settings dialog: Assessment Mappings tab**

Use this tab of the "Settings dialog" to define the score thresholds and assessment ranges to be used for scoring scorecard objects.

For more information, see:

- "Understanding Initiative or Objective Performance Assessment"
- "Defining Assessment Mappings for Scorecards"

### Components

#### Score Threshold

Use this field to enter the numerical score (for example, 80) that divides each assessment range.

For example, you might add thresholds and assessment ranges which specify that, when a score falls between 0 and 33, the performance level is Critical, between 34 and 66, Warning, and between 67 and 100, OK.

### **Assessment Range**

Use this field to enter the name of each assessment range (for example, Acceptable).

#### **Icon**

Use this button to display the "Replace Icon dialog", where you select the icon to represent each assessment range.

#### Color

Use this button to display the a color dialog, where you select the color to represent each assessment range.

### **Threshold Menu**

Displays the following options:

- **Remove Range** Use this option to remove a score threshold and its corresponding assessment range.
- **Add Above** Use this option to add a score threshold and its corresponding assessment range above the current score threshold.
- Add Below Use this option to add a score threshold and its corresponding assessment range below the current score threshold.

### **Add Threshold**

Use this button to add a score threshold and assessment range below the last score threshold.

## **Settings dialog: Dimension Settings tab**

Use this tab of the "Settings dialog" to set up the controls for dimensions in the point of view area of a scorecard.

For more information, see:

- "About the Point of View Area"
- "Setting Up the Point of View Controls"

### Components

### **Dimensions Settings**

Displays all the dimensions that are referenced by KPIs in a scorecard and shows their current settings. Use this area to set up the controls for the dimensions.

To set up the control for a dimension, select the dimension and then click the Edit Row button to display the "Edit Dimension Settings dialog".

## Settings pane

Use this pane to set the thresholds that are to be displayed in a funnel graph or gauge.

Each threshold has a high and a low and is associated with a color in which the range identified by the threshold will be displayed in the gauge, such as green for acceptable, yellow for warning, and red for critical.

For more information, see:

- "Results tab: Funnel editor"
- "Results tab: Gauge editor"

This pane is part of the "Results tab: Funnel editor" and the "Results tab: Gauge editor".

### Components

### High values are desirable

Use this box to specify whether the high values are the desirable goal. Selecting this box lists the statuses in order from the most desirable indicator (for example, Excellent) at the top to the least desirable indicator (for example, Warning) at the bottom.

### Low values are desirable

Use this box to specify whether the low values are the desirable goal. Selecting this box lists the statuses in order from the least desirable indicator (for example, Warning) at the top to the most desirable indicator (for example, Excellent) at the bottom.

### **Threshold**

Use this list to specify the data values in a gauge that highlight a particular range of values. The values must be between the minimum and the maximum values set for the gauge limits. The range identified by a threshold is filled with a color that is different from the color of other ranges.

To specify a data value, you can either:

- Enter a static value directly in a Threshold field.
- Click the Threshold Options button to set the value based on a measure column, a variable expression, or the results of a SQL query.

### **Threshold Options**

Displays these options to set a threshold:

- *Measure column* Use this option to use the measure column.
- **Dynamic** Use this option to let the system determine the threshold value.
- **Custom Value** Use this option to enter a specific value.

If you select this option and then:

- Click elsewhere on the pane without entering a value, the value of the **Threshold** field reverts to the previous value
- Enter an invalid value in **Threshold** field, the value is cleared so that you can enter a new value

- **Variable Expression** Use this option to display the "Enter Expression dialog", where you specify a variable expression.
- **SQL Query** Use this option to display the "Enter Expression dialog", where you specify a SQL query.
- **Remove** Use this option to remove the threshold.
- **Add Above** Use this option to add a threshold row above the current row.
- **Add Below** Use this option to add a threshold row below the current row.

#### **Status**

Use this list to specify the label for each range identified by a threshold as well as the color in which the range is to be displayed in the gauge. Use the **Status Options** button to specify a label and the **Color** button to specify a color for each range.

### Status Options

Displays the following options:

- Threshold Values Use this option to use the current threshold values as the label for the range. The **Status** box is disabled when you select this option.
- **Specify Label** Use this option use text that you specify as the label for the range, for example Excellent. After selecting this option, enter the text in the Status box.

#### Color

Displays the Color Selector dialog, where you select the color for the range that is identified by the threshold.

### First Stage x final stage target value

This field is available only for last-stage only funnel graphs.

Use this box to enter the factor required to meet the target. In a last-stage only funnel graph, the target value of all the stages before the last are calculated based on the last stage target value and this target factor.

### Add Threshold

Use this button to add a new threshold row.

### **Delete Threshold**

Use this button to delete a threshold row.

## **Show More Columns dialog**

Use this dialog to add or remove columns that display data such as the status, trend, target, and variance of KPIs on a KPI Watchlist, perspective, initiative, or objective. This enables you to customize the KPI data displayed by specifying visible columns.

For information about KPIs, see:

- "KPI Watchlist editor: Performance tab"
- "Analytics pane"
- "Scorecard editor: Perspective tab"

### Components

### **Available Columns**

Displays all of the columns that you can select to present a wide variety of data for the KPIs that evaluate the initiative, as described in Table B-4.

To display additional columns to present more KPI data on the initiative, select the columns individually or as groups by pressing Shift or Ctrl, and then click **Move**. To display all KPI data available, click Move All.

### Visible Columns

Displays the columns that are currently visible. To remove columns, select them individually or in groups by pressing Shift or Ctrl, and click **Remove**. To remove all KPI data displayed, click **Remove All**.

### Move

Use this button to display a column that you select in the **Available Columns** pane.

### Move All

Use this button to display all available columns.

Use this button to hide a column that you select in the **Visible Columns** pane.

### Remove All

Use this button to not display any KPI data on the initiative.

### **Notes**

Table B-4 lists and describes the available KPI data columns.

Table B-4 Available KPI Data Columns

| Column | Description  |
|--------|--|
| Change | If you enabled trending, displays the amount by which the KPI's current actual value differs from the actual value of the previous period. |
|        | For example, if the actual value of KPI for "Annual Number of Sales" is 2000 and was 1850 last year, the change is 150.                    |

Table B-4 (Cont.) Available KPI Data Columns

| Column               | Description  |
|----------------------|--|
| % Change             | If you enabled trending, displays the percent by which the KPI's current actual value differs from the actual value of the previous period.  |
|                      | For example, if the actual value of KPI for "Annual Number of Sales" is 2000 and was 1850 last year, the change percent is 7.5%.   |
| Data Type            | Displays the data type of the KPI values that are stored in the database, for example, integer or percentage.  |
| Formatting           | Displays the KPI's raw actual and target values in the formatting for the unit that quantifies the values, such as dollars or days.  |
| Label of Node        | Displays the KPI's descriptive name that was specified in the "Add KPI dialog".  |
| Last Run             | Displays the date on which KPI value calculations were performed by the backup server.   |
| Normalized           | Displays the KPI value after it was converted from its original scale (a value between 1 and 50, for example) to a standard scale (values between 1 and 100) so that you can compare it with other KPI values.   |
|                      | For example, assume that you want to use a scale of 0-100 to assess two KPIs. The first KPI is expected to have a value between 0 and 10. It collects a value of 3. The second KPI is expected to have a value between 0 and 1000. It collects a value of 800. To evaluate this data as x% or 100, the Normalize feature converts the KPI values to one between 1 and 100. Accordingly, the first KPI is multiplied by 10 (30) and that of the second KPI is divided by 10 (80). |
| Owner                | Displays the userID of the person responsible for managing the KPI.  |
| Status               | Indicates the performance level of the KPI determined by comparing its actual value with its target.   |
|                      | If you own the KPI, you can right-click to override its status.  |
| Target               | Displays the KPI's desired value.  |
| Target (Unformatted) | Displays the KPI's raw target value. For example a target value of 134500 dollars would be formatted as \$134,500.00.  |
| Trend                | Indicates whether KPI performance has improved or declined, is good or bad, or has remained the same. The trend is determined by calculating the value by which the current actual value differs from that of the previous period.   |
|                      | If you select a period of time for the time  |
|                      | dimension using the Point of View bar on   |
|                      | the global header, all KPIs are evaluated by   |
|                      | that period, regardless of their trend period  |
|                      | specified using the KPI editor.  |
| Value                | Displays the KPI's current value.  |
| Value (Unformatted)  | Displays the raw KPI value. For example a value of 450019 dollars would be formatted as \$4,500.19.  |

Table B-4 (Cont.) Available KPI Data Columns

| Column     | Description  |
|------------|--|
| Variance   | Displays the value by which the KPI's actual value differs from its target value. For example if the actual value for a Net Profit KPI is 600,000 and its target is 650,000, then the variance is 50,000.  |
| % Variance | Displays the percent by which the KPI's actual value differs from its target value. For example if the actual value for a Net Profit KPI is 600,000 and its target is 650,000, then the variance as a percent is 7.7%  |
| Weight     | If you evaluate initiative performance by assigning weights to individual KPIs, then this displays these individual weights.  If you do not enter weights that add to 100% Oracle Scorecard and Strategy Management does it for you. The weight for each KPI is used with its normalized assessment value to determine the performance of the objective or initiative. The normalized assessment value is compared against the assessment ranges in the "Settings dialog: Assessment Mappings tab". The range that contains the normalized assessment value is found and that determines the objective's status. |

## Sign In page

Use this page to sign in to Oracle Business Intelligence.

For more information, see:

- "Signing In to Oracle BI Enterprise Edition"
- "Signing Out of Oracle BI Enterprise Edition"
- "Introduction to Oracle BI Enterprise Edition"

### Components

### **User ID**

Use this field to enter your user ID.

### **Password**

Use this field to enter your password.

### Sign In

Use this button to sign in to Oracle Business Intelligence with the credentials you have entered.

### Language

Use this box to select the language in which you want to display the user interface. The language that you choose overrides the language preference that you specified in the "My Account dialog: Preferences tab" for the current session, only. Note that changing the language for the current session does not change the locale for the session.

## **Status Override dialog**

Use this dialog to override the status of an initiative, objective, or KPI for the current point of view. (For more information on the point of view, see "About the Point of View Area".)

For more information, see:

"About Status Overrides"

"Overriding the Statuses of Initiatives, Objectives, and KPIs"

### Components

### **New Status**

Use this box to select the new status that you want to apply.

### Reason

Use this box to enter the reason for the override.

### History

Displays any overrides that previously have been applied to the initiative, objective, or KPI for the current point of view.

To expand or collapse the History area, click the **Expand All** or **Collapse All** button.

## Strategy pane

Use this pane to create and manage the objectives that form your corporate strategy For more information, see:

- "What Are Objectives?"
- "Creating Objectives"
- "What Are Strategy Trees?"
- "What Are Cause & Effect Maps?"

This pane is part of the "Scorecard editor".

### Components

### **Strategy Tree**

Displays the objectives that have been defined for the scorecard and the KPIs that measure their progress and performance hierarchically. It also shows the statuses of objectives and KPIs using the appropriate colors and symbols that you specified for assessment mappings. For more information on assessment mappings, see "Defining Assessment Mappings for Scorecards".

#### **Toolbar**

This toolbar contains the following buttons:

- **Create Objective** Use this button to display the "Scorecard editor: Objective Details tab", where you create a new objective as a child of the selected objective.
- Open Use this button to open the selected object for editing or viewing, depending on the current mode.
- **Delete** Use this button to delete the selected object, if you have the appropriate permission.
- **View Strategy Tree** Use this button to display the strategy tree for the selected object.
- View Cause & Effect Map Use this button to display the cause & effect map for the selected object.

### Right-Click Menu on an Object

Displays options for working with the object. The options vary depending on the object and whether Scorecard editor is in edit or read-only mode:

- Open Use this option to open the selected object for editing or viewing, depending on the current mode.
- Create Objective Use this option to display the "Scorecard editor: Objective Details tab", where you create a new objective as a child of the selected objective.
- **View Strategy Tree** Use this option to display the strategy tree for the selected object.
- **View Cause & Effect Map** Use this option to display the cause & effect map for the selected object.

- **Delete** Use this option to delete the selected object, if you have the appropriate permission.
- **Analyze** This option is available only when you select a KPI. Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

**Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis may not persist after your Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

- **Create Agent** This option is available only when you select a KPI. This option is available only when you select a KPI. Use this option to display the "Create New Agent dialog", where you create an agent from the KPI.
- Contact Owner Use this option to display the "Contact Owner dialog", where you can contact the business owner of the object.

## Strategy Map tab: Details tab

Use this tab of the "Scorecard editor: Strategy Map tab" to specify supporting information for the strategy map.

For more information, see:

- "What Are Strategy Maps?"
- "Creating Strategy Maps"

### Components

#### Name

Displays the name of the strategy map.

### Description

Use this field to enter a description of the strategy map.

### **Business Owner**

Displays the userID of the person responsible for managing the strategy map. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

### **Objectives and KPIs**

Use this table to view and manage the objectives and KPIs that are displayed in the strategy map.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

### **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the strategy map.

## Strategy Map tab: Diagram tab

Use this tab of the "Scorecard editor: Strategy Map tab" to create a diagram that shows how objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives. It also shows cause and effect relationships between objectives.

For more information, see:

- "What Are Strategy Maps?"
- "Creating Strategy Maps"

### Components

### Diagram

Use this area to drag and drop the objectives and KPIs that you want to show aligned by perspectives.

Each node (that is, the representation of an objective or KPI) on the diagram shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

If a cause and effect relationship exists between two objectives, a line connects the two objectives to indicate the relationship.

To display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu".

To edit a causal linkage, right-click the linkage line and select Edit Causal Linkage. The "Causal Linkage dialog" is displayed.

To delete a causal linkage, right-click the linkage line and select **Delete Causal** Linkage.

To display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the representation. To collapse this data, click the up arrow.

To zoom in and out of the diagram or to add a cause and effect relationship between two objectives, use the toolbar buttons on the "Scorecard editor: Strategy Map tab".

To work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See 'About Comments".

To work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".

### Legend

Use the "Legend pane" to view the legend for the strategy map.

## Strategy Tree tab: Details tab

Use this tab of the "Scorecard editor: Strategy Tree tab" to specify supporting information for the strategy tree.

For more information, see:

- "What Are Strategy Trees?"
- "Creating Strategy Trees"

### Components

#### Name

Displays the name of the strategy tree.

### Description

Use this field to enter a description of the strategy tree.

### **Business Owner**

Displays the userID of the person responsible for managing the strategy tree. To specify the business owner, click the Set User button to display the "Business Owner dialog", where you can search for and select the business owner.

### **Objectives and KPIs**

Use this table to view and manage the objectives and KPIs that are displayed in the strategy tree.

See "Initiatives & KPIs table, Objectives & KPIs table, Objectives, Initiatives & KPIs table, and New KPI Watchlist table".

### **Related Documents**

Use the "Related Documents area" to view and manage documents that provide supporting information to the strategy tree.

## Strategy Tree tab: Diagram tab

Use this tab of the "Scorecard editor: Strategy Tree tab" to view an objective and its supporting child objectives and KPIs hierarchically in a tree diagram.

For more information, see:

- "What Are Strategy Trees?"
- "Creating Strategy Trees"

### Components

### Diagram

Displays the tree diagram for an objective. Each node (that is, the representation of an objective or KPI) shows the status of the objective or KPI by displaying the icon and color that represents the assessment range. A KPI node also displays the actual value of the KPI and the percent variance from the target.

To display options that allow you to work with a node, click the **Options** button (on the right side of the node) to display the "Node Options Menu".

To display additional performance data for the KPI, such as target value or variance, click the down arrow at the bottom center of the node. To collapse this data, click the up arrow.

To expand or collapse a node, click the plus (+) or minus (-) icon beneath the node.

To zoom in and out of the diagram, use the toolbar buttons on the "Scorecard editor: Strategy Tree tab".

To work with comments (if any), click the **Comment** button in the upper-right corner of a node to display the "Status window", where you can read the comments that previously have been added, add another comment, or reply to a comment. See "About Comments".

To work with status overrides (if any), click the red asterisk in a node to display the "Status window", where you can view the overrides that previously have been applied or apply another override. See "About Status Overrides".

### Bird's-eye View

Displays an overhead view of the tree diagram. The white box focuses on the nodes that are currently in view in the diagram area.

If (and only if) all of the nodes do not fit in the content pane, you can drag the white box to scroll the diagram.

## Node Options Menu

The Node Options menu is displayed from the Options button on a node (that is, a representation of an objective or KPI) in a view diagram. The options that are available depend on the type of view and can include the following:

- **Action Links** Displays the action links that are available for the current status of the objective or KPI. Click a link to execute the action.
- **Add Related Strategy Nodes** Use this option to add to the diagram objectives that are related to this objective (that is, are linked by cause or effect).
- **Remove From Diagram** Use this option to remove the objective or KPI from the diagram.
- **Drill Down** This option is available only for strategy trees. Use this option to move the focus on this node and expand the node to show its children.
- **Drill Up** This option is available only for strategy trees. Use this option to collapse the node and move the focus to the parent node.
- **Show Hidden Causes** This option is available only for cause & effect maps. Use this options to show any causes that were hidden on the diagram.
  - To show multiple hidden nodes at one time, click the **Cause and Effect Map Preferences button** on the cause & effect map toolbar to display the "Cause & Effect Map Preferences dialog: Hidden Nodes tab".
- **Hide** This option is available only for cause & effect maps. Use this option to hide the node on the diagram.
  - You might, for example, want to hide some nodes so that you can view only the nodes for which you are the business owner.
  - To hide multiple nodes at one time, click the Cause and Effect Map Preferences button on the cause & effect map toolbar to display the "Cause & Effect Map Preferences dialog: Hidden Nodes tab".
- **Open** Use this option to display the objective or KPI for editing or viewing, depending on the current mode.
- Contact Owner Use this option to display the "Contact Owner dialog", where you can contact the business owner of the objective or KPI.
- **Add Comment** Use this option to display the "New Comment dialog", where you add a comment to the objective or KPI.
- Override Status Use this option to display the "Status Override dialog", where you override the status of the objective or KPI.
- **Analyze** This option is available only for a KPI. Use this option to create an analysis based on the KPI. The analysis is automatically saved in the catalog in the My Folders/Drills folder.

**Note:** Because the My Folders/Drills folder is used for temporary storage, the analysis may not persist after your Oracle Business Intelligence session ends. To preserve the analysis, copy it to another directory. For example, to preserve an analysis that you plan to use in a shared dashboard, copy it to a folder in /Shared Folders.

**Note:** The right-click menu of an objective or KPI also contains these options.

# Style and Conditional Formatting dialog

Use this dialog to format the elements of a graph, such as bars and lines.

For more information, see:

"Formatting the Visual Appearance of Graphs"

### Components

### **Positional**

Use the "Style and Conditional Formatting dialog: Style Formatting tab" to format a graph based on the position of graph elements.

### Conditional

Use the "Style and Conditional Formatting dialog: Conditional Formatting tab" to format a graph based conditions applied to columns.

## Style and Conditional Formatting dialog: Conditional Formatting tab

Use this tab of the "Style and Conditional Formatting dialog" to format a graph based on conditions applied to columns.

For more information, see:

"Formatting the Visual Appearance of Graphs"

### Components

#### Column tabs

Displays tabs for each column to which you can add conditions. Click a column tab to display the conditions that are currently defined for the column. You can modify a condition using its Condition toolbar.

### **Add Condition Format**

Use this button to add a condition. This button first displays a list of the columns to which you can apply conditional formatting and then, once you select a column, the "New Condition dialog", where you define the condition to add.

### Clear All

Use this button to delete all conditions on the current column tab.

### **Condition Toolbar**

The condition toolbar is the collection of components that displays to the right of a condition. It includes the following components:

- Edit— Use this button to display the New Condition dialog, where you edit the condition.
- **Color** Use this box to display the Color Selector dialog, where you select the color to be applied to the column values that meet the condition.
- **Delete** Use this button to delete the condition.

## Style and Conditional Formatting dialog: Style Formatting tab

Use this tab of the "Style and Conditional Formatting dialog" to format a graph based on the position of graph elements.

For more information, see:

"Formatting the Visual Appearance of Graphs"

### Components

### **Graph Element Tabs**

Displays tabs for each graph element to which you can apply formatting. Click a column tab to display the positions that are currently formatted.

### **Custom Formatted Positions**

Displays the positions that have been formatted for the element.

To specify a color for a position, click the down arrow in color box to display the Color Selector dialog.

**Note:** If you specify 0 for the width of a line, the legend marker changes from the default line marker to symbol markers for the line as well as for other lines in the graph (for example, the symbol markers are shown as the legend markers for all the lines in the graph).

### Add new position

Use this button to add a new position entry to the Custom Formatted Positions table.

### Remove selected position

Use this button to remove the selected position entry in the Custom Formatted Positions table. To select an entry, click the first column in the entry row.

## **Subject Areas pane**

Use this pane to:

- Select the columns and members to add to an analysis.
- Select the column to use when you create or edit a named filter.
- Add or remove subject areas that are related to the primary subject area that you have selected. You select a primary subject area when you create a new analysis or a new named filter. (Only related subject areas that you have permission to access are available for you to add.)
- Refresh the columns that display in the subject area or refresh the subject area's metadata after the administrator made changes to the columns in the repository.
- View the metadata dictionary information for a selected subject area, folder, column, or hierarchy level.

For more information, see:

- "What Are Subject Areas and Columns?"
- "Specifying the Criteria for Analyses"
- "Creating or Editing Column Filters"
- "Viewing Metadata Information from the Subject Areas Pane"

This pane is part of all the tabs of the "Analysis editor" and part of the "Filter editor".

### Components

### **Subject Area Tree**

Displays the primary subject area and any related subject areas that you have added.

Use this tree to:

Expand and collapse a folder to show the folder's columns.

In addition, when the Subject Areas pane is displayed in the:

- "Analysis editor: Criteria tab", you can expand a hierarchical column to show its levels.
- "Analysis editor: Results tab", you can expand a column to show its members. (You cannot show its members in the Criteria tab.)

If tooltips have been configured in the Oracle BI Presentation Services Administration page, then you can hover over a column name and see its description.

- Select the columns and members to add to an analysis. You can add a column or a member to an analysis in one of two ways:
  - Double-click the column to display it in the "Selected Columns pane" or the Results tab.
  - Drag and drop the column to the Selected Columns pane. You can press Ctrl+Click to select multiple values and drag and drop those values together.

You cannot select levels of a hierarchical column; you can select only the entire column.

Select the column to use when you create or edit a named filter. To do so, double-click the column to display the "New Filter dialog", where you create the filter based on the selected column.

#### Toolbar

The toolbar contains the following buttons:

- Add/Remove Subject Areas This button is available only if one or more related subject areas are available and you have permission to access them. Use this button to display the "Add/Remove Subject Areas dialog", from which you can add or remove related subject areas.
- **Refresh** Clicking this button executes the default behavior of **Refresh Display**. Clicking the arrow beside the button allows you to select one of the following options:
  - **Refresh Display** Use this option to refresh the subject area view without refreshing the Oracle BI EE server cache. Use this option when the subject area does not contain the columns that you expect to see. If you use this option and the expected columns still do not display, then use the Reload Server Metadata option.
  - **Reload Server Metadata** Use this option to reload the subject area's metadata when you know that the administrator has built new metadata in the repository or if after you use the **Refresh Display** option and the subject area display still does not contain the columns that you expect to see in the subject area. For example, if the administrator added a new measure column to the repository metadata, then you would not see it in the subject area until after you reloaded the metadata. The administrator cannot force a reload of the subject area's metadata. Reloading the metadata also refreshes the subject area's display.

Reloading metadata clears the metadata cache that is used by all users within the server instance, and after the metadata is reloaded, the metadata cache is re-built as user queries are run. This process of re-building the cache can slow system performance slightly.

**View Metadata Dictionary** — This button is available only when the Subject Areas pane is displayed in the Criteria tab or the Results tab of the Analysis editor and only if the administrator has configured for the display of metadata dictionary information. This button is not available if you select column values or members. Click this button to displays the metadata dictionary page for the selected subject area, folder, column, or hierarchy level.

For more information, see "Viewing Metadata Information from the Subject Areas Pane".

### **Notes**

See "Columns in the Excluded Drop Target" for information on how adding columns to a view using the Subject Areas pane can place them in the Excluded drop target.

# **Summary View pane**

Use this pane to view summary information about the selected initiative, objective, or KPI.

For more information, see "Viewing Overview Information".

This pane is part of the "Scorecard editor: Overview tab".

### **Summary Information**

This area displays summary information about the selected objective, initiative, or KPI. For more information on the specific information that is displayed, see:

- "Initiative or Objective Summary View"
- "KPI Summary View"

## Initiative or Objective Summary View

This view is displayed in the "Summary View pane" when you select an initiative in the "Initiatives pane" or an objective in the "Strategy pane". Use this view to view basic settings for the selected initiative or objective (for example, status, business owner, and so on) as well as a status summary showing the number of KPIs and initiatives, or KPIs and objectives, that evaluate progress in each performance state.

### Components

#### Score

Displays the score for the selected initiative or objective in a gauge.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment".

### Children

Displays for the selected initiative or objective:

- The number of its child initiatives or child objectives in each assessment range.
- The number of its child KPIs in each assessment range.

If there is at least one child objective, initiative, or KPI for a particular status value, the status name is a hyperlink that drills to a dynamically created list of the child objectives, initiatives, and KPIs.

#### **Descendants**

Displays for the selected initiative or objective:

- The number of its descendant initiatives or objectives in each assessment range.
- The number of its descendant KPIs in each assessment range.

If there is at least one descendant objective, initiative, or KPI for a particular status value, the status name is a hyperlink that drills to a dynamically created list of the descendant objectives, initiatives, and KPIs.

### Perspective

Displays the perspective with which the selected objective or initiative is associated. For example, an Improved Client Response Time objective might be associated with the Customer perspective.

For more information on perspectives, see "What Are Perspectives?"

#### **Business Owner**

Displays the userID of the person responsible for managing the selected initiative or objective.

### Assessment Formula

Displays the rule that is used to assess the overall performance of the selected initiative or objective, for example, **Worst Case** or **Weighted**.

### Go to this initiative or Go to this objective

Displays the "Scorecard editor: Initiative Details tab" or the "Scorecard editor: Objective Details tab") for the selected initiative or objective in the current mode (edit or view).

## **KPI Summary View**

This view is displayed in the "Summary View pane" when you select a KPI in the "Initiatives pane" or "Strategy pane". Use this view to view basic KPI settings for the selected KPI as well as performance data.

### Components

#### Score

Displays the score for the selected KPI in a gauge.

For more information on scores, see "Understanding Initiative or Objective Performance Assessment".

### **Perspective**

Displays the perspective with which the selected KPI is associated. For example, a Net Profit KPI might be associated with the Financial perspective.

For more information on perspectives, see "What Are Perspectives?"

#### **Trend**

Displays information that indicates how the performance of the selected KPI has changed since the last reporting period or a date that you specify.

### **Business Owner**

Displays the userID of the person responsible for managing the selected KPI.

### **Performance**

Displays the following performance data for the selected KPI:

- **Actual** Displays the current value of the KPI (for example, Product Sales).
- Target Displays the desired value of the KPI (for example, Product Sales + 1500).
- **Variance** Displays the amount by which the actual value differs from the target value. This partially determines the performance level of the KPI and indicates how realistic the target KPI value might be or if it needs to be adjusted.
- % Variance Displays the amount by which the actual value differs from the target value expressed as a percentage.
- **Change** If you enabled trending, displays the amount by which the current actual value differs from that of the previous period. For example, if an actual value for an "Annual Sales" KPI is 25000 but was 20000, the change is 5000.
- % Change If you enabled trending, this displays the change value as a percentage.

#### History

Displays a graph showing, for the selected KPI, the actual values over time, such as for financial quarter, according to their assessed performance. For example, if four performance states (critical, warning, good, and excellent) were defined, KPI values are displayed according to these mappings.

The graph will only show multiple time periods if trending was enabled in the KPI's definition.

### Go to this KPI

Displays the "Scorecard editor: KPI Details tab" for the selected KPI in the current mode (edit or view).

# **Table Properties dialog**

Use this dialog to edit the properties of a table or pivot table.

For more information, see "Editing Table and Pivot Table Views".

### Components

### Style

Use the "Table Properties dialog: Style tab" to specify formatting preferences for tables and pivot tables.

### Writeback

Use the "Table Properties dialog: Write Back tab" to set up for users to modify values in columns in tables.

## Table Properties dialog: Style tab

Use this tab of the "Table Properties dialog" to specify formatting preferences for tables and pivot tables.

For more information, see "Editing Table and Pivot Table Views".

This dialog is also displayed as:

Pivot Table Properties dialog

### Components

### **Paging Controls**

Use this box to specify where the paging controls are displayed for the view. The paging controls include First 25 Rows and Next 25 Rows. You can select either the top or bottom of the view or you can select to hide the controls. For information on the paging control buttons, see "Results tab: Data View editor".

### Rows per Page

Use this field to enter the number of rows to display per page for the view. This setting affects the number of rows that are displayed with the First, Next, and Previous paging control buttons.

### **Display Column & Folder Headings**

Use this box to specify whether to display headings for the columns and the view. You can select from the following:

- Only column headings Displays only the column headings, not the view headings.
- As separate rows Displays the column and view headings as individual rows in the view.
- **As Folder.Column** Displays the column names with the lowest-level folder name from the Subject Area. For example, suppose that you have a column called Color in the Products folder. With this option, the column heading displays as Products.Color, rather than simply Color.
- **As Folder.Column (where needed)** Displays the column names with the folder name from the Subject Area but only when the column names are not unique. This option is available only for tables.

### Enable alternating row "green bar" styling

Use this box to specify whether to add green bar styling to the view. Green bar styling shows alternating rows or columns in a light green color. (Light green is the default color, which you can change.) Select this box to add green bar styling. Deselect it to omit green bar styling.

### **Alternate**

Use this box to select one of the following options for green bar styling for pivot tables:

- **Innermost Column** Applies green bar styling only to the column that is closest to the data.
- **All Columns** Applies green bar styling to all columns.

### **Repeat Cell Values**

Use this box to indicate that all cells that span rows are repeated. For example, suppose that you have a table that has Year and Month values. When this box is not selected, Year is displayed once for Month values. When this box is selected, Year is repeated for all Month values. This box is available only for tables.

#### **Set Alternate Format**

Use this button to display the "Edit Format dialog", where you add cosmetic formatting for the green bar styling of the view.

### **Listen to Master-Detail Events**

Use this box to specify whether a table or pivot table is to act as a detail view in a master-detail relationship and listen for master-detail events, select this box and then specify the channel or channels in the **Event Channels** field.

For information on master-detail relationships, see "What is Master-Detail Linking of Views?"

### **Event Channels**

This field is displayed only if you select the **Listen to Master-Detail Events** box.

Use this field to enter one or more channels on which the table or pivot table is to listen for master-detail events raised by one or more master views. The channel name is case sensitive and must match exactly the channel name specified in the master view. Separate channels with commas, for example, channel a, channel b.

The remaining components of this dialog are described in "Column Properties dialog: Style tab".

## Table Properties dialog: Write Back tab

Use this tab of the "Table Properties dialog" to configure the view for users to modify values in columns.

For more information, see "Modifying Values and Performing Write Back" and "Column Properties dialog: Write Back tab".

### Components

#### **Enable Write Back**

Use this box to allow users to modify values in the view, if one or more columns in the analysis has been enabled for write back. Deselect the box to prevent write back on the view, even if one or more columns have been enabled for write back.

### **Template Name**

Use this field to enter the name of the template to employ for writing back values. The template includes SQL statements that write values back to the data source.

### **Toggle Table Mode**

Use this box to enable the toggling of modes for writing to the view. Click the box to allow the view to be toggled from View mode to Edit mode so that users can write back values. Deselect the box to prevent the view from being toggled from View mode to Edit mode; rather, the view is always in Edit mode.

### **Apply Button**

Use this field to enter the text to be displayed on the button that users click to apply the values that they have entered; that is, to write the values back to the data source. The default value for this button is **Apply**.

### **Revert Button**

Use this field to enter the text to be displayed on the button that users click to clear the values that have just entered for write back. The default value for this button is Revert.

### **Done Button**

Use this field to enter the text to be displayed on the button that users click to indicate that they have finished entering values for write back. Any values that have not yet been written back to the data source are written back. The default value for this button is Done.

### **Button Position**

Use this list to select the position of the buttons on the view, such as Right or Left.

## Tasks pane

Use this pane to perform object-specific tasks. The tasks that you can perform depend on the object's type, the object's permissions, and your privileges.

For more information, see:

- "What is the Oracle BI Presentation Catalog?"
- "Who Uses the Catalog?"
- "Object-Specific Tasks"

This pane is part of the "Catalog page".

### Tasks Options

- **Add to Briefing Book** Use to add the selected object to a briefing book. After you select this option, the "Save Briefing Book Content dialog" displays. For more information about briefing books, see "Working with Briefing Books".
- **Archive** Use to pack or bundle the contents of a a folder or multi-component object (a scorecard, for example) that you unpack in another directory. This enables you to transfer data between environments (development to test, for example).
- **Copy** Use to duplicate a folder or object and paste it in another directory.
- **Create Agent** (This option is available only when you select a KPI.) Use this option to display the "Create New Agent dialog", where you create an agent from the KPI.
- **Create Link** Use to display a folder or object if the directory in which it resides is very large, requiring scrolling. For example, to quickly access the components of a Sales and Marketing scorecard in a corporate directory that contains thirty scorecards, create a link to the Sales and Marketing scorecard.
- **Create Shortcut** Use to create a shortcut to the object or folder. When you create a shortcut, Oracle BI EE adds the shortcut to the current folder. You can then move this shortcut to another location within the catalog.
- **Delete** Use this button to remove a folder or object that you created from the catalog. If you delete shared folders or objects, other users who have added shared objects such as analyses to their Quick Answers list, or HTML content, links, analyses, and so on, to their personal dashboards will lose access.
  - Do not delete objects that are used throughout OBI (KPIs for example) until you are certain that they are no longer used or require
- Disable Use this option to temporarily disable an agent. See "Disabling and Enabling Agents' Schedules".
- **Edit** Use this button to modify objects using the associated Editor or Builder. For example, select a KPI and click this button to modify the KPI in the KPI Builder.
- **Enable** Use this option to cause an agent to run on schedule again. See "Disabling and Enabling Agents' Schedules".
- **Expand** Use this button to display the contents of a selected folder. For example, select a Dashboards folder and click this button to display all available dashboards. If you select a scorecard, all associated objects such as (mission statements, perspectives, objectives, and the Strategy Tree etc.) are displayed.
- **Execute** Use to run a script, URL, or web service action. See "Working with Actions".
- **Export** Use to save a report in PDF, Microsoft Excel, or MHTML format.
- **Open** Use to view an object or expand folder contents.
- **Permissions** Use to enable users to view folders and objects. To grant specific privileges that determine the tasks that users can perform with these objects, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.
- **Print** Use to print the current page.

- **Properties** Use to view or modify the selected object's properties. When you select this option, the "Properties dialog" displays.
- **Rename** Use to change the name of a folder or object.
- **Subscribe** Use this option to subscribe to an agent that the owner has made available to you for subscription. See "Subscribing to Agents".
- Unsubscribe Use this option to unsubscribe from an agent to which you are currently subscribed. See "Unsubscribing from Agents".

# **Text Properties dialog**

Use this dialog to specify properties for a text object that you are adding to a dashboard page. If you have the appropriate privileges, then you can enter HTML tags into the object.

For more information, see "Adding Content to Dashboards".

### Components

#### **Bold, Italic, Underline**

Use these buttons to apply Bold, Italic, or Underline to characters in the text object.

#### Line Break

Use this button to insert a line break between characters in the text object.

### **Contains HTML Markup**

Use this option to work with HTML codes, as described in "Working with HTML Markup".

#### **Text**

Use this field to enter the text that you want to include on the dashboard.

The name that you assign in the Dashboard editor is the name that will be used for the text object in the Oracle BI Presentation Catalog.

You can reference variables in this field. For the syntax to use, see "What Is the Syntax for Referencing Variables?" For more information on variables, see "Using Variables".

#### **Preview**

Use this button to view how the text will be formatted on the dashboard in the Preview area box. If you make any changes, then you can click **Preview** again to see the results.

# **Unarchive dialog**

Use this dialog to find and specify how you want to upload the archive file to the Presentation Catalog. For more information, see "What is Archiving?"

### Components

#### **Archive File**

Use this field to enter or browse for the name and location of the archive file. Archive files are named according to the following convention: <name of the presentation services folder>.catalog. For example, sales\_dashboards.catalog.

#### Replace

Use to specify if and how to replace an existing folder or object with the same name. Note the following options:

- All Select this option to replace any existing folders or objects with the same names as folders or objects included in the archive file that you are uploading.
- Old Select this option to replace folders or objects except those folders or objects that already exist unless they are older than the source.
- None Select this option to add any new folders or objects, but preserve any existing folders or objects that already exist.
- Force Select this option to add and replace all folders or objects.

#### **ACL**

Use to specify how the folders or objects are assigned permissions via Access Control Lists (ACLs) when unarchived. Note the following options:

- **Inherit** Inherits the folder or object's permissions (ACL) from its new parent folder.
- **Preserve** Preserves the folder or object's permissions (ACL) as it was in the original, mapping accounts as necessary.
- Create Preserves the folder or object's permissions (ACL) as it was in the original, creating and mapping accounts as necessary.

See Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition for information on ACL entries.

### Views pane

Use this pane to:

- Add new views to an analysis
- Add views that have been added to the analysis to compound layouts
- Edit views added to an analysis
- Remove views from the analysis

For more information, see:

"Displaying the Results of Analyses"

This pane is part of the "Analysis editor: Results tab".

### Components

#### **Views List**

Displays the views that have been added to the analysis. For a list of available view types, see "What Types of Views Are Available?"

#### **Toolbar**

This toolbar contains the following buttons:

- **Add View** Use this button to add a view to a compound layout. First make the compound layout to which you want to add the view the current layout, in the **Views List**, select the view that you want to add, then click **Add Views**.
- **New View** Use this button to add a new view to the analysis. Click **New View** and then select the type of view that you want to add. You can edit and save the views, which is added to the Views List. You can then add it to a compound layout using the **Add** button.
- Edit View Use this button to edit a view. In the View List select the view that you want to edit, then click **Edit View**. The view's editor is displayed.
- **Duplicate View** Use this button to create a copy of the view that you have selected.
- **Remove View from Analysis** Use this button to remove a view from the analysis. In the Views List, select the view that you want to remove, then click Remove View from Analysis. The view is removed from the analysis as well as from any compound layout to which it had been added.

# **Basic Information to Tell Your Users**

This appendix describes the major features and functions that most end users typically work with. This appendix contains the following topics:

- "Exporting and Copying Results"
- "Sorting Values in Table Views and Pivot Table Views"
- "Drilling in Results"
- "About Running Actions Using Action Links and Action Link Menus in Analyses and Dashboards"
- "Running Actions Associated with Action Links in Analyses and Dashboards"
- "Using Section Sliders in Graphs and Gauges"
- "Working with Map Views on Dashboard Pages"
- "Zooming and Scrolling in Graphs"
- "Working with Views that Are Linked in Master-Detail Relationships"
- "Modifying Data in a Table View in a Dashboard Page or Analysis"
- "Accessing BI Publisher Reports in Dashboards"

# **Exporting and Copying Results**

As you work with analyses, you might want to export them to various formats or copy the results into Microsoft Office applications such as Excel and PowerPoint.

### **Exporting Results**

Various options are available for exporting the results of analyses, for example, exporting to Microsoft Excel or exporting to PowerPoint. These options are available on the Export link that is displayed with an analysis in a dashboard, if the content designer includes the link there.

#### To export results:

- **1.** Navigate to the analysis.
- **2.** Click the **Export** link and select the export option that you want.

For more information on the export options, see "Export Menu Options for Views and Results".

### Copying Results to Microsoft Applications

You can copy the results of analyses to either Microsoft Excel or PowerPoint, in which Oracle Business Intelligence Add-in for Microsoft Office has been installed and configured. The content designer can include the **Copy** link with results in dashboards. For information on installing and configuring Oracle BI Add-in for Microsoft Office, see Appendix D, "Integrating with Microsoft Office."

#### To copy a result to Microsoft Excel or Microsoft PowerPoint:

- Navigate to the analysis in a dashboard.
- Click the **Copy** link, which copies the XML code for the analysis in its current state (that is, with the current context, for example, with applied filters, prompts, and so on) to the Windows Clipboard.
- **3.** Open Microsoft Excel or PowerPoint.
- **4.** From the Oracle BI menu in Microsoft Excel or PowerPoint, select **Paste**.

For information about the Oracle BI menu, see the Help for Oracle BI for Microsoft Office that is available within Microsoft Excel or PowerPoint.

# Sorting Values in Table Views and Pivot Table Views

You can sort values in table views and pivot table views. You can sort on members, measures, and rows (where you see sideways triangles). You cannot sort on page or section edges. To sort values, you use the "Sorting Options Menu and Buttons".

# **Drilling in Results**

Many of the results that are displayed in views represent hierarchical data structures. The metadata specifies these hierarchies, and this enables you to access the different levels of detail within them. For example, information in a sales graph might be categorized by region. Clicking a specific region in the graph might display each country within that region, if the country is the next level within the hierarchy of the metadata. Such clicking is referred to as "drilling."

If the content designer has set up views for drilling, then you can drill in them on dashboards.

# What is Drilling?

Drilling is a way to navigate through data in views quickly and easily.

- You drill down to display data in more detail, which displays more members.
  - You can drill down to an actual item in the database. For example, if you work in sales, you can drill down to the city level within a sales analysis, and observe that there is a large sale pending in Paris. If you are using an Oracle Siebel operational application, then you can then drill down on the pending sale and go directly to that opportunity in the Oracle BI application.
- You drill up to display data in less detail, in hierarchical columns.
  - For example, you might drill up from a month value to see a summary for the whole year. You can drill up in the current hierarchy, either for the entire column at the header level or for individual members. For example, you can drill up from District to Region. Drilling up hides the current level (such as District) and retains the higher level (such as Region).

### Where Can I Drill?

You can drill in the following types of views:

- Table and Pivot Table See "Drilling in Tables and Pivot Tables".
- Graphs See "Drilling in Graphs".
- Maps See "Drilling in Map Views".

#### **Drilling in Tables and Pivot Tables**

When you drill down in a table or a pivot table, the detail level data is added to the current data. For example, when you drill from a continent, the table displays data for the continent and for the countries in that continent. For an attribute columns, the list of members in the header is expanded, and it includes the original member.

The way that you drill in tables and pivot tables depends on the column type, as described in the following sections.

**Drilling in Attribute Columns** To drill in an attribute column, click the heading or member in which you want to drill. When you hover over the value before clicking, an underline is displayed below the value to indicate that you can click to drill.

When you drill in an attribute column, you add the lower level to the view. All views are affected by drilling in an attribute column, which is equivalent to a filter drill. After you click the value, a column is added to the analysis and a filter is automatically created and listed in the Criteria tab.

You cannot drill on groups for attribute columns. To see the definition of a group for an attribute column, edit the corresponding step in the Selection Steps pane.

You can also use the "Right-Click Menu for Tables and Pivot Tables" to drill in attribute columns.

**Drilling in Hierarchical Columns** To drill in a hierarchical column, click the **Expand** and **Collapse** icons beside the members. Click to expand or collapse one level. For example, expanding from World Total to Continents inserts the Continent members while retaining the value for World Total.

When you drill in a hierarchical column, you expand and collapse the nodes of data that are already in the view. Drilling in a hierarchical column affects only that particular view. No other views are affected.

Drilling in level-based hierarchies and value-based hierarchies works the same. Each time you drill in a hierarchy, you expand or collapse one level. For example, if the hierarchy has a level for continents, regions, and cities, and the view shows continent data, you can expand from Australia down one level to display regions in Australia. From there, you can expand one level from a region, to cities in that region, or you can collapse one level, back to continents.

When you drill, the drill state is preserved. If you collapse at a higher level and re-expand, then the members are re-displayed at the same drill point.

When you click the Collapse icon, you collapse back to the current level any levels in the hierarchy that are present in the analysis, regardless of whether they were added by drilling down or by adding the levels from the Subject Areas pane.

You can perform asymmetric drilling, which allows you to drill various members to different levels. For example, if you expand World, then you might see Americas, Asia, and Australia at the same second-level for continents. You can then drill Americas to expand it and see its regions, while Asia and Australia are not expanded.

You can expand and collapse the members of a group for hierarchical columns. For example, if you have a group that includes cities and the group is included in a view, then you see the cities when you click on the group name.

You can also use the "Right-Click Menu for Tables and Pivot Tables" to expand and collapse hierarchical columns.

#### **Drilling in Graphs**

When you drill down in a graph, the detail level data replaces the current data. For example, when you drill down from a continent, the graph displays data for the countries in that continent, but not for the continent itself.

You can drill down in the following ways:

- You can click a label (for which drilling is available) on any axis or in the legend to drill down. (A change in the mouse pointer indicates that drilling is available.)
- If the graph contains only attribute columns and measure columns, then you can click a data point to drill all columns.
- If the graph contains multiple columns including at least one hierarchical column, then when you click a label or a data point, you see a menu from which you can select which columns to drill down. If there are action links available, then the menu also displays those links.

You do not drill up in a graph. Use the **Back** button on the browser to return to a previous graph.

> **Note:** The time series line graph does not support drill down on a time column where data types other than data or date-time are used.

# About Running Actions Using Action Links and Action Link Menus in **Analyses and Dashboards**

As you analyze data in analyses, view dashboards, or view content delivered by agents, you might want to take some action as a result of the business insight you gained from the data. You can do so by using action links and action link menus, if available:

- An action link is a link embedded in an analysis (on a column heading or a data value) or dashboard page that, when clicked, runs an associated action.
  - For example, suppose a data value in an analysis includes an action link that sends the analysis to a specified e-mail address. If, after analyzing the data, you decide that your manager needs to see this analysis, you can send it to him directly from the analysis by clicking the action link.
- An action link menu is a menu embedded on a dashboard page that groups multiple action links as options on the menu. An action link menu lets you choose, from a list of action link options, the right action to take.

### Running Actions Associated with Action Links in Analyses and **Dashboards**

To run an action associated with an action link:

**1.** Do one of the following:

- If the action is associated with a stand-alone action link, then click the action
- If the action is associated with an action link on an action link menu, then click the action link menu and then select the action link option.
- **2.** Respond to any request for more information or any confirmation prompt that is displayed.

**Note:** A successful invocation message indicates only that the action that is associated with the action link ran successfully. It does not indicate that the process or operation that the action represents ran successfully.

# **Using Section Sliders in Graphs and Gauges**

Some graphs and gauges include section sliders. Section sliders let you limit the data that is shown in a graph or gauge. For more information on section sliders, see "Defining Section Sliders in Graphs and Gauges".

#### To use a section slider in a graph or gauge:

- Use the components of the section slider to select a value as follows:
  - To select a particular value, move the slider thumb to the value that you want.
  - To move the slider thumb to a value to the left of the current value, click the decrease button (the second button from the left on the slider).
  - To move the slider thumb to a value to the right of the current value, click the increase button (the right-most button on the slider).
  - To sequentially move the slider thumb through all the values, click the play button (the left-most button on the slider). The play button changes to a pause button to allow you to stop on a particular value.

The data in the graph or gauge is limited by the current value as indicated by the slider thumb.

# Working with Map Views on Dashboard Pages

A content designer can include map views on dashboard pages. A map view presents data in spatial form. Through location context, map views allow you to easily discover trends and transactions across regions that might not be obvious in tables or graphs. For example, a map view can show a map of the United States with the states color-coded by sales performance.

This section provides the following information on working with maps on dashboard pages:

- "Panning in Map Views"
- "Zooming in Map Views"
- "Drilling in Map Views"
- "Modifying Thresholds for Formats on a Map View"
- "Showing or Hiding Formats on a Map View"

For information on creating maps, see "Editing Map Views".

**Note:** When you download a map to a Microsoft PowerPoint document, you might notice that some of the map format images and sliders might not be downloaded correctly or completely.

### **Panning in Map Views**

You set panning using the map's toolbar and can pan on the main map or on the overview map. You can also use the reticule in the overview map to move around. When you pan, a new query is not issued.

With the Pan tool selected, you can do the following:

- Click and drag on the map background.
- Hover over a region of the map to display an information window for that region for the data that is directly below the mouse cursor.
- Click to drill and display an information window that becomes a drill popup.
- Double-click the map to zoom.
- Click to update the detail view, if the map has been configured as a master view. For information, see "Working with Views that Are Linked in Master-Detail Relationships"

You can pan using either the Pan tool or the Pan buttons above the zoom slider. Pan is the default mode for the map view, and the pan mode is indicated by a hand cursor.

#### To pan using the Pan tool:

- Click the **Pan** button in the toolbar.
- Click the map background and drag and drop it to the desired location.

#### To pan using the Pan buttons:

Click a Pan button above the zoom slider to pan the map in the desired direction.

# **Zooming in Map Views**

Zooming the map adjusts the detail of the geographic data that is shown on the map. Zooming in from a country level might show state and city details. Zooming out from a street-level view might show cities but not street-level information.

When you zoom, you can do the following:

- Click and drag on the map background. To zoom by clicking and dragging, you must first select the zoom mode from the toolbar. The default mode is pan, which is indicated by a hand cursor. When you are in zoom mode, the mouse pointer changes to a magnifying glass and you can click-zoom or drag-zoom directly on the map itself.
- Hover over a region of the map to display an information window for that region for the data that is directly below the mouse cursor.
- Click to zoom in and out. When you click, the map zooms in one "increment" using the click location as the center point.

Zooming and drilling are not synonymous. When you zoom, no drill is performed (that is, no new query is issued). However, if you drill on a map layer, that drill will likely result in a new zoom level being displayed, if a new layer is added to the map. If a new layer is not added, then the zoom level does not change.

You can zoom using either the buttons on the toolbar or the zoom slider. When you use the zoom slider, you zoom in or out of the map as it is currently displayed. When you hover over the zoom slider, the names of the map layers are displayed beside their lowest zoom level. Click the names to zoom the map to that level. When you zoom, a new query is not issued.

#### To zoom using the Zoom In and Zoom Out tools:

- Click the **Zoom In** or **Zoom Out** button in the toolbar.
- Click the map background to zoom in that spot.

#### To zoom using the buttons on the zoom slider:

Click the plus or minus sign on either end of the slider. You can also hover over the slider, then click the name of the level to zoom to.

### **Drilling in Map Views**

Drilling in a map allows you to navigate through the data. Drilling is available when the Pan tool is selected, as indicated by a hand cursor. If you hover over map data, then an information window is displayed with various information about that location.

When you click a region or a point on the map, one of the following occurs:

- If the column is configured as a master for another view, then that view is updated with the latest information.
- If the column or map is configured to drill into a column or to perform a single action, then the drill or action is immediately initiated.
- If the column is configured to perform multiple actions or if multiple drills are possible, then the information window that is displayed contains a list of the actions or links for the multiple columns.

All columns in which you can drill are displayed in the information window as link text. When you click the link for a simple drill, you drill in the data, the map is redrawn with a different layer, and the information window is dismissed. If action links are defined, then you see a popup window that shows additional links. For information, see "Running Actions Associated with Action Links in Analyses and Dashboards".

Drilling updates map formatting to reflect the newly drilled data. For some drills (such as drilling on a State), the map zooms to the specified region while simultaneously updating the formatting. How you zoom and the formats and geographic levels that the map contains affect what is displayed. Formats have particular "zoom ranges" and are visible at different zoom levels. Zooming back up might display a new format, if you zoom out past the zoom level of the drilled format.

After you have drilled down, use the zoom slider to drill back up. Use the **Return** button on a dashboard page to display the original map view at the zoom or drill level that was in place before you started drilling.

# Modifying Thresholds for Formats on a Map View

The content designer can give you the ability to modify the thresholds that are used for displaying formats on the map view. You know that you have this ability if you see a slider under a format name in the Map Formats pane. Modifying thresholds is a type of visual analysis of the data, which is sometimes referred to as "what-if analysis."

Format ranges are displayed as color fills on the slider background, with a "thumb" for each threshold that can be edited. Users can manipulate the slider to specify their own threshold values, as follows:

- Hovering over a thumb displays the value under that thumb.
- Dragging the thumb adjusts the threshold.
- Clicking a section on the slider moves the thumb to that section.
- Right-clicking the slider displays a menu with the following options:
  - **Edit Color** Displays a dialog, in which you select a predefined or custom color for the threshold.
  - **Add Threshold** Adds another threshold to the slider, including a thumb to indicate the threshold. This addition creates a new formatting bin with a new color. For example, if three bins exist (with colors red, yellow, and green) and you create a new threshold, then four bins will now exist. A maximum of 12 bins is supported.
  - **Remove Threshold** Removes the threshold above where you right-clicked, including removing the thumb from the slider and a formatting bin.
- Clicking on a slider thumb number value displays a text box in which you can edit the number that corresponds to the threshold value. Press Enter or click outside the box to update the threshold value and the thumb position.

### Showing or Hiding Formats on a Map View

Content designers can superimpose multiple layers of information (sometimes known as themes) on a single map view. They can create formats to enhance the layers. You can display or hide the formats for a map.

#### To show or hide the formats of a map view:

- In the Map Formats pane, from the View menu, select either View All Formats or View Visible Formats.
- In the Map Formats pane, click or clear the box beside a format's name.

# **Zooming and Scrolling in Graphs**

If zooming and scrolling has been enabled for a graph, then the graph includes a Zoom icon. The zoom icon allows you to zoom in and out of a graph's plot area via its axes. Once you zoom in on an axis, you can scroll the axis.

To enable zooming and scrolling in a graph, the content designer sets the zoom and scroll properties in the "Graph Properties dialog: General tab".

When you zoom an axis, a zoom and scroll slider is displayed. Figure C-1 shows an example of a zoom and scroll slider.

Figure C-1 Example of a Zoom and Scroll Slider



A zoom and scroll slider consists of the following components:

**Left or bottom button** — Scrolls to the left on the X axis or to the bottom on the Y axis, revealing portions of the graph that are out of view.

- **Right or top button** Scrolls to the right on the X axis or to the top on the Y axis, revealing portions of the graph that are out of view.
- Scroll thumb Represents the visible portion of the graph in relation to the full graph. You drag the scroll thumb to dynamically scroll the graph, revealing portions of the graph that are out of view.
- Resize handles Are displayed at each end of the scroll thumb when you hover over the thumb. You use the resize handles to zoom in and out an axis.
- **Tooltip** Is displayed only when a user hovers over either the thumb or a resize handle and describes the data that is currently displayed in the scroll thumb.

#### To zoom and scroll in a graph:

- Hover the mouse over the graph to display the **Zoom** button.
- **2.** Click the **Zoom** icon and then:
  - If only one axis has zoom and scroll enabled, then select either **Zoom In** or Zoom Out.
  - If both axes have zoom and scroll enabled:
    - To zoom in and out and scroll on the X axis, select **Horizontal Axis** and then either **Zoom In** or **Zoom Out**. A zoom and scroll slider is displayed on the X axis.
      - To unzoom the X axis and display the actual graph size, select **Actual Size**.
    - To zoom in and out and scroll on the Y axis, select **Vertical Axis** and then either **Zoom In** or **Zoom Out**. A zoom and scroll bar is displayed on the Y
      - To unzoom the Y axis and display the actual graph size, select **Actual Size**.
  - To unzoom both the X and Y axes and display the actual graph size, select Actual Size.

You can now zoom and scroll as desired by:

- Using the **Zoom** button to zoom in and out incrementally
- Dragging the scroll thumb on an axis to dynamically scroll the graph, revealing portions of the graph that are out of view
- Clicking the scroll buttons on an axis to scroll left and right (on the X axis) or up and down (on the Y axis)
- Using the resize handles to zoom in and out on an axis

# Working with Views that Are Linked in Master-Detail Relationships

Views can be linked in master-detail relationships. When views are linked in such a relationship, you can click on values in designated columns in one view (called the master view) and effect a data change in another view (called the detail view). For more information on master-detail relationships, see "What is Master-Detail Linking of Views?" and "Linking Views in Master-Detail Relationships".

In Figure C-2, Regional Sales Master View and Regional Sales Detail View are linked in a master-detail relationship such that clicking a dollar value in Regional Sales Master View will effect a data change in Regional Sales Detail View. For example, clicking the dollar value for the Eastern Region in the Regional Sales Master View,

updates the Region prompt in Regional Sales Detail View to EASTERN REGION and refreshes the entire view.



Figure C-2 Example of Views Linked in a Master-Detail Relationship

# Modifying Data in a Table View in a Dashboard Page or Analysis

As a user of a dashboard page, you might have the ability to modify the data that you see in a table view. This ability is often referred to as "write back" and is available if you have the appropriate privileges and if the administrator has configured it. You can update a value in the view that is written back to the record in the data source.

If your user name has the appropriate privileges and if the administrator has configured for the modification of data values, then a write back button (often labeled **Update**) is displayed on the table view. After clicking the button, you can update or write to the data source. For example, you can enter sales targets for the current quarter in a Sales dashboard. The name that is displayed on the write back button depends on how the content designer prepared the view for write back.

#### To update records in table views:

- Display the dashboard and the view in which you want to modify values.
- Click the button that is labeled **Update** or a similar name that indicates that write back is enabled to switch to Edit mode, in which you can modify values.

If you know that you can modify the values in the view but do not see an **Update** button or similar button, then the content designer has specified that the view always be in Edit mode. You can begin modifying values immediately and you will never see an **Update** button or similar button.

The updating capability is not available for hierarchical columns.

- When you are in Edit mode, you can type a value in the appropriate field. Fields to which you can write back have the appearance of a text box in a dialog.
- **4.** After you have modified values, click one of the following buttons (or buttons with similar names):
  - **Apply**: By clicking this button, you modify the values in the data source and keep the view in Edit mode with the modified values being displayed.

- **Revert**: By clicking this button, you restore the data to its original values if you have not yet clicked **Apply** or **Done** to save the modifications. Once you have written a modified value back to the data source, you cannot revert to its original value.
- **Done**: By clicking this button, you modify the values in the data source and return the view to View mode (if the content designer has indicated that the view is not always in Edit mode).

When you click the **Apply** or **Done** button, the entire dashboard is refreshed from the data source, because other analyses on the dashboard might depend on that

If filters are enabled in the table view and you enter a value in a record that is affected by the filter, then that record might no longer be displayed in the view after the data is refreshed from the data source.

### About Handling Errors for Write-Back

As you modify data values, you might encounter various errors. For example, you might enter an invalid value in a field and attempt to write it back to the data source, or the administrator might have specified the incorrect write-back template to use. If a problem occurs, then you will see a basic error message. To obtain additional information about the problem, an administrator can increase the logging level of the session to create detailed log files. The administrator can search the log files for Presentation Services for a string such as "saw.writeback.action.executeimpl".

If you are writing back multiple values at one time and accidentally enter invalid values, then the results depend on the rows that are affected, as described in the following list:

- If you are updating multiple values on one row and at least one of the values is invalid, then no values are written to the database.
- If you are modifying values in multiple rows and some of the values are invalid, then it is possible that some values might not be written back while some will write back successfully.

# **Accessing BI Publisher Reports in Dashboards**

As a user of a dashboard page, you have the ability to access reports that were created in Oracle BI Publisher. The report might be embedded in the dashboard page, or you might see a link that opens the report in BI Publisher.

#### To access a BI Publisher report:

- Display the dashboard page that contains the report that you want to access.
- **2.** Perform the following tasks:
  - If the report is embedded in the page, then use the functions from the BI Publisher toolbar to affect the report.
    - If prompts are included on the dashboard, then use those prompts to specify parameters that affect the display of data in the report. Depending on the design of the report, certain prompts will not affect the display of data in the report.
  - If the page contains a link for the report, then click the link to open the report in BI Publisher.

### Using the Oracle BI Publisher Toolbar on a Dashboard Page

The Oracle BI Publisher toolbar is displayed on the dashboard that contains a BI Publisher report. The options that you see depend upon your permissions. The toolbar functions are described in the following table:

| Function    | Description  |
|-------------|--|
| Template    | If multiple report templates are available, then you see them in the Template list. Select a new template and then click <b>View</b> .   |
| Output Type | If multiple output types are available, then select the desired output type (HTML, PDF, RTF, Excel, data) from the list and click <b>View</b> . The output is rendered in the browser.   |
| View        | Select a template or specify an output type and click this button to view the BI Publisher report.   |
| Export      | When you click this button, you are prompted to save the BI Publisher report or to open the appropriate application for the output type.   |
| Send        | When you click this button, the Destination dialog is displayed. From this screen, select the delivery destination (for example, Email, Printer, Fax, FTP, or Web Folder) and enter the appropriate information. You can select multiple delivery destinations.  |
| Schedule    | Click this button to schedule the BI Publisher report. For more information about scheduling a report, see <i>Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher</i> .  |
| Analyzer    | If you have been assigned permission to access the Online Analyzer, then click this button to create a pivot table of the BI Publisher report's data. For more information about using the Online Analyzer, see <i>Oracle Fusion Middleware Report Designer's Guide for Oracle Business Intelligence Publisher</i> . |

# **Integrating with Microsoft Office**

This chapter describes the integration of Oracle BI Enterprise Edition with Microsoft Office and how to configure the Oracle BI Add-in for Microsoft Office. It contains the following topics:

- "Integrating Analyses with Microsoft Office"
- "Features of Oracle BI for Microsoft Office"
- "Installing and Configuring Oracle BI for Microsoft Office"
- "Setting Properties in the bioffice.xml Configuration File"
- "Configuring SSL on Oracle WebLogic Server for Oracle BI for Microsoft Office"
- "Configuring an SSO-Enabled Oracle BI EE for Oracle BI for Microsoft Office"

For information on using the Oracle BI for Microsoft Office after it is installed, see the Help system that you can access from the Microsoft Office application such as Excel or PowerPoint.

# **Integrating Analyses with Microsoft Office**

From the Oracle BI EE Home page, you can download and install the Oracle Business Intelligence Add-in for Microsoft Office. This add-in enables you to access and run Oracle BI EE analyses directly within your Microsoft Office workspace. The refreshable analyses leverage not only native Office functionality but also the scalability and performance of the Oracle BI Server.

When the Oracle BI Add-in for Microsoft Office is properly installed and configured, you can work with analyses directly in Microsoft Excel and PowerPoint using the following means:

- "Copying Views and Analyses"
- "Viewing Objects in the Catalog"

# Copying Views and Analyses

You can copy and paste into Microsoft Office documents the following view types: table, pivot table, graph, funnel graph, gauge, title, and filters view. Copied views are pasted as Microsoft Office documents, including Excel or PowerPoint tables and graphs. By pasting these views, you leverage Office functionality while referencing the Oracle BI semantic layer. Only these Oracle BI EE views that are supported by the Oracle BI Add-in for Microsoft Office are pasted into Office documents.

This section provides the following information:

- "General Guidelines for Copying Views and Analyses"
- "Copying Table and Pivot Table Views"
- "Copying Graph, Funnel Graph, and Gauge Views"

#### General Guidelines for Copying Views and Analyses

The following general guidelines apply to copying and pasting all supported views:

- You can copy views from the Analysis editor and from dashboard pages and paste them into Microsoft Excel and PowerPoint documents. You can use the **Copy** link for an analysis on a dashboard page to copy the analyses definition and current state as applicable of Oracle BI EE views on dashboard pages and paste the view objects into Microsoft Office documents. The term "state" includes criteria such as drilling in columns, values for filters, and selections on the page edge.
  - For example, you can drill on a graph from year to quarter, then drill from region to the district level. Use the **Copy** link, if available for that view, to copy this state and paste it into a Microsoft Office document using the Oracle BI Add-in for Microsoft Office. When you refresh the Oracle BI EE views inside the Office document, the data is refreshed and displayed based on this state of the request. Filters are preserved and can be changed subsequently in Microsoft Office documents.
- All views pasted from the Oracle BI Add-in for Microsoft Office are refreshable, even views pasted as images or as Flash objects. Title views cannot be refreshed so that user customizations are maintained. You can customize native Office objects, but you cannot customize images.
- You can copy compound views from the Analysis editor and dashboard pages. Compound views are pasted into Microsoft Office documents as native Office tables and graphs.

#### Copying Table and Pivot Table Views

When you copy and paste a table or pivot table:

- You can specify whether to include the title view and filters for the analysis.
- Table and pivot table views from Oracle BI EE are pasted as native Office format tables.
- An inserted pivot table view presents data from an analysis with page items as well as a section-based layout, if these had been defined in the Oracle BI EE pivot table view for the analysis.

#### Copying Graph, Funnel Graph, and Gauge Views

When you copy and paste a graph, funnel graph, or gauge:

- Graph views from Oracle BI EE are pasted as native Excel or PowerPoint graphs, as static but refreshable images, or as high-quality Flash objects (in PowerPoint).
  - You can change the graph type and apply other formatting changes using Excel and PowerPoint graphing capabilities. These changes are preserved during data refreshes.
- Gauge views, funnel graph views, and time-line series graph views from Oracle BI EE can be pasted into Office documents as static but refreshable images and as Flash objects.

### Viewing Objects in the Catalog

You can start Microsoft Excel and PowerPoint and use the Oracle BI menu or ribbon to sign in and display the Oracle BI Presentation Catalog. The Catalog browser is presented as a pane in Excel and PowerPoint to browse analyses, both user-created and shared, as shown in Figure D-1. You can also display the individual views that are available for each analysis.

Oracle BI Task Pane Oracle Business Intelligence **# [** Catalog: Shared Folders 1. Overview 2. Functional Examples and Dashboards Answers Queries ⊕ Dashboard Prompts Hierarchical Columns E- Report Views and Charts : Chart Legends Chart Slider & Prompt ---- table View!1 ... dvtchart!1 + Chart Zoom Master Detail Events Linking 4. Actionable Intelligence ± • Dashboards 🛓 🛅 KPIs ₩ MPIs (Eden Inc) 6. Published Reporting Balance Letter Report xdo Annual Sales Analysis Analysis Properties: Item Details Caption Chart Slider & Prompt Path /shared/3. Analysis and... Created 6/8/2010 8:09:16 PM Accessed 6/16/2010 4:44:14 PM LastModified 6/8/2010 8:09:16 PM Desc 04231225

Figure D-1 Catalog Browser in Oracle BI for Microsoft Office

Gauge views and funnel graph views from Oracle BI EE are inserted from the Catalog browser in the following formats:

- Image, in Excel and PowerPoint
- Flash, in PowerPoint only

### Features of Oracle BI for Microsoft Office

Oracle BI for Microsoft Office provides useful features for working with analyses in Microsoft Excel and PowerPoint, as described in the following sections:

- "General Features"
- "Features of Oracle BI Add-in for Microsoft Excel"

- "Features of Oracle BI Add-in for Microsoft PowerPoint"
- "Features from Oracle BI EE Not Supported by Oracle BI for Microsoft Office"

For additional information on the features of Oracle BI for Microsoft Office, see the Help system that you can access from the Microsoft Office application such as Excel or **PowerPoint** 

### **General Features**

Oracle BI for Microsoft Office provides the following general features:

- Office access When installed on Excel 2007, the Oracle BI Add-in for Microsoft Office functionality is made available via a native Office ribbon interface. When installed on Excel 2003, the Oracle BI Add-in for Microsoft Office-in's functionality is made available via a menu and a toolbar. In both cases, an Office pane is available for browsing the Oracle BI Presentation Catalog and for selecting views to insert inside Office documents.
- Ability to secure BI data in BI views inserted inside Excel spreadsheets or PowerPoint presentations — This feature enables you to secure inserted BI tables and graphs so that users must present credentials to view the Oracle BI data. When you secure the data, the BI data is removed from the document. Only the view definitions are retained, which allows the Oracle BI Add-in for Microsoft Office to refresh the data within these BI views.
- Views See "Copying Views and Analyses" for information on working with these view types: table, pivot table, graph, funnel graph, and gauge.
- Graph customization When you work with native graph objects in Excel and PowerPoint, you can customize the look and feel of the inserted views by editing the objects and changing the graph type and changing the formatting of various graph components (such as the axes, legend, and title). These customizations are retained when the views are refreshed.
- Prompts You can use the following features of Oracle BI EE prompts:
  - Multi-selection of values
  - Search for prompt values
  - Shuttle UI for selecting multiple values
  - Skip prompts
  - Enter ranges of values
  - Cascading prompts where the value of one prompt limits the values available in a subsequent prompt (Year = 2010 will restrict Quarters to only Q1, Q2, if the current date is May 10 2010, for example.)
  - Runtime operator selections where you can select operators (such as equal, greater than, and less than) in the same ways that you select prompt values.
- Column selection When you insert an Oracle BI EE view in an Excel or PowerPoint document, you can select a limited set of columns in that view to be inserted. When the view is inserted, you can select the view and click the Edit **Prompts and Levels** menu item, toolbar button, or ribbon item to modify the original selection and to add or remove columns from the view.

You can edit or change the levels or prompts for the following types of views:

Views that you inserted from the Oracle BI Presentation Catalog within Excel and PowerPoint.

- Views that you copied using the **Copy** link in analyses on dashboard pages and pasted into Excel and PowerPoint documents using the Oracle BI Add-in for Microsoft Office's Paste option.
- Server independence Views inserted in Excel and PowerPoint documents by the Oracle BI Add-in for Microsoft Office that is connected to one server can be refreshed by connecting Oracle BI for Microsoft Office against a different server, in two ways:
  - If you insert the view into Microsoft Office by copying and pasting from Oracle BI EE, then the view is considered to be detached from the original analysis that was saved in a directory in the catalog. Each data refresh obtains the data that corresponds to a snapshot of the analysis definition.
  - If you insert the view into Microsoft Office by selecting it from the Oracle BI Presentation Catalog, then the analysis must exist in the same directory in the catalog on the two servers.
- Support for the Oracle BI Security model, including support for both encrypted (SSL) and Single Sign-On modes — The same login that you use for Oracle BI EE is available for the Oracle BI Add-in for Microsoft Office. For information, see "Configuring SSL on Oracle WebLogic Server for Oracle BI for Microsoft Office" and "Configuring an SSO-Enabled Oracle BI EE for Oracle BI for Microsoft Office".
- Logging You can enable logging in the Oracle BI Add-in for Microsoft Office on the Advanced tab of the Preferences dialog. Log messages are written in an HTML format to files in the Oracle BI Add-in for Microsoft Office's installation folder.

#### Features of Oracle BI Add-in for Microsoft Excel

Oracle BI Add-in for Microsoft Excel provides the following features for working with analyses:

- Formats You can change the formats of data items that are displayed in Oracle BI EE tables and pivot tables that were imported into Excel and PowerPoint documents. To change the format of an item in an Excel sheet, you must modify the style for that cell. These formatting changes are then preserved even during refreshes. Furthermore, these formatting changes are applied to all cells with the same style.
- Conditional formats When you import a view, any conditional formatting that was defined in Oracle BI EE is not maintained in Microsoft Excel. You can define Excel-specific conditional formats for data that was imported from BI views. Conditional formatting that you define using Excel's native conditional formatting features can be preserved during data refreshes. This requires that the Oracle BI Add-in for Microsoft Office perform cell-level comparisons to preserve the formatting while updating the cell values with updated data, which is performance-intensive.
  - You select the **Preserve Conditional Formatting** option in the General tab of the Preferences dialog if you want to preserve formatting at the cost of performance. If performance is more important then preserving conditional formatting, then deselect this option to remove the formats when the view is next refreshed.
- Customization You can customize the default appearance of Oracle BI EE table and pivot table views that are inserted in Excel worksheets using an Excel template that is installed during the client Oracle BI Add-in for Microsoft Office installation. The template resides in the following location:
  - ADDIN\_HOME/BIOfficeExcel/Template/OBIReport.xlt

where ADDIN\_HOME is the location where you installed the Oracle BI Add-in for Microsoft Office.

#### Features of Oracle BI Add-in for Microsoft PowerPoint

Oracle BI Add-in for Microsoft PowerPoint provides the following features for working with analyses:

- Flash objects You can insert or copy and paste Oracle BI EE graphs as Flash objects.
- Crosstab Pivot tables inserted in PowerPoint documents are displayed with a true crosstab look and feel.
- Customization During data refreshes, tables and pivot tables retain most of the customizations that you make to the views inserted in PowerPoint documents. Examples of customization include font properties such as font size, color, and bold or italic styles.

### Features from Oracle BI EE Not Supported by Oracle BI for Microsoft Office

The following list outlines features of Oracle BI EE that are not available in Oracle BI for Microsoft Office. If you try to paste into Oracle BI for Microsoft Office an analysis or view that uses any of these features, then you see a warning message that the paste cannot occur.

- Hierarchical columns
- Map views
- Graph section sliders
- Section sliders in general
- KPIs and Scorecard views
- Action links
- Master-detail linking
- Write back
- Table and graph views with sections and pages

# Installing and Configuring Oracle BI for Microsoft Office

This section describes how to install and configure Oracle BI for Microsoft Office. It includes the following topics:

- "What is the Oracle BI Office Server?"
- "Installation and Configuration Steps"
- "Tasks Performed by the Installer for Oracle BI EE"
- "Installing the Oracle BI Add-in for Microsoft Office"
- "Configuring Connections to Oracle BI Presentation Services"

#### What is the Oracle BI Office Server?

The Oracle BI Office Server is a server-side J2EE application. The BI office client on a Windows system communicates with the BI Office Server, which itself communicates with the Oracle BI Presentation Server using Web services. The configuration file for the BI Office Server is named bioffice.xml.

### Installation and Configuration Steps

The following list describes the steps that are required to install and configure Oracle BI for Microsoft Office:

- The administrator runs the installer for Oracle BI EE.
  - See "Tasks Performed by the Installer for Oracle BI EE".
- The administrator configures Oracle BI for Microsoft Office to work with Secure Socket Layer (SSL) and Single Sign-On (SSO), as described in the following sections:
  - "Configuring SSL on Oracle WebLogic Server for Oracle BI for Microsoft Office'
  - "Configuring an SSO-Enabled Oracle BI EE for Oracle BI for Microsoft Office"
- Users download and run the installation file for the Oracle BI Add-in for Microsoft Office from the Oracle BI EE Home page.
  - See "Installing the Oracle BI Add-in for Microsoft Office".
- Users configure for connections from the Oracle BI Add-in for Microsoft Office to Oracle BI Presentation Services.
  - See "Configuring Connections to Oracle BI Presentation Services".

### Tasks Performed by the Installer for Oracle BI EE

When you run the installer for Oracle BI EE, the installer performs the following tasks for Oracle BI for Microsoft Office:

- Installs and configures the Oracle BI Office Server into the Oracle WebLogic Server container.
  - The installer for Oracle BI EE configures the BI Office Server to point to the Oracle BI Presentation Services server by setting the SawBaseURL property in the bioffice.xml configuration file. After Oracle BI EE is installed, you can modify the configuration of the BI Office Server, as described in "Setting Properties in the bioffice.xml Configuration File".
- Deploys the bioffice.ear and biofficeclient.war files.

# Installing the Oracle BI Add-in for Microsoft Office

Content designers and end users can download and run the installation file for the Oracle BI Add-in for Microsoft Office from the Oracle BI EE Home page.

Important Notes: Note the following before installing the Oracle BI Add-in for Microsoft Office:

- If you have an existing version of the Oracle BI Add-in for Microsoft Office, then remove that version before you run the installation program to obtain the new version. Run the Microsoft Windows "Add or Remove Programs" feature in the Control Panel to uninstall the existing version.
- Microsoft recommends uninstalling all add-ins before upgrading to a new version of an Office product. If you plan to upgrade from Microsoft Office 2003 to 2007,

then ensure that you first uninstall the Oracle BI Add-in for Microsoft Office. With Office 2003 still installed, do one of the following:

- Run the client OracleBIOffice.exe file and use the wizard to uninstall the Oracle BI Add-in for Microsoft Office.
- Use the Microsoft Windows "Add or Remove Programs" feature in the Control Panel to uninstall the Oracle BI Add-in for Microsoft Office.

Then upgrade to Office 2007 and run the OracleBIOffice.exe file to install the Oracle BI Add-in for Microsoft Office.

- If the following prerequisite software does not exist on your computer, then you are prompted to install it. You might be prompted to restart the computer after installing the software. You can find this software on the Microsoft Web site:
  - Office2003-kb907417sfxcab-ENU\_Patch
  - Shared Add-In Extensibility Microsoft .Net 2.0
  - Shared Add-In Support Update Microsoft .Net 2.0
  - Microsoft .Net Framework 2.0.

#### To install the Oracle BI Add-in for Microsoft Office:

1. Ensure that the administrator has granted you the Access to Oracle BI for Microsoft Office privilege.

For information on this privilege, see Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition.

- **2.** Ensure that you are familiar with the "Important Notes" that are documented earlier in this section.
- **3.** Close all Microsoft Office applications.
- **4.** Display the Home page for Oracle BI EE.
- **5.** In the Get Started section, click the **Download BI Desktop Tools** link, then click Oracle BI for MS Office.
- 6. In the Download dialog, specify a location to which you want to download the executable file with which you will install Oracle BI for Microsoft Office.
- 7. When the file is downloaded, display Windows Explorer and double-click the file that you downloaded to run it.

During the installation, you might be prompted to install prerequisite software. After installing the prerequisite software, you might be prompted to restart the computer.

After restarting, navigate back to the location of the downloaded file and double-click it to reinitiate the install.

- **8.** From the Welcome screen, select **Next**.
- **9.** Follow the instructions in the wizard to select the appropriate options for your system.
- **10.** After all components are installed, the Install Shield Wizard Complete dialog is displayed. Click **Finish**.

See "Copying Results to Microsoft Applications" for information on how end users work with Oracle BI for Microsoft Office.

### Configuring Connections to Oracle BI Presentation Services

When the software is downloaded and installed, each user must enter the connection information in the Preferences dialog for Oracle BI Add-in for Microsoft Office on the client computer to enable communication with the BI Office Server.

To configure connection information from the Oracle BI Add-in for Microsoft Office to Presentation Services:

- Open Microsoft Excel or Microsoft PowerPoint. (The connection information is shared, therefore you can enter it through either application and it will be available to both.)
- **2.** From the Oracle BI menu, select **Preferences**.
- **3.** On the Connections tab, select **New**.
- **4.** Complete the following fields in the Connection Detail dialog:
  - **Server Name** Enter the name that you want to use for this connection.
  - **b. BI Office Server** Enter the URL for the BI Office Server (for example: bioffice-server.example.com).
  - **c.** Application Name Enter the Application Name that was defined for the BI Office Server when the BI Office Server application was deployed to its Oracle WebLogic Server container. The name defaults to "bioffice", but if another name was specified during deployment, then enter that name in this field.

**Note:** The value in the **Application Name** field is appended to the values for **BI Office Server** and **Port** to construct the URL that the client uses to connect to the BI Office Server. For example: http://bioffice-server.example.com:9704/bioffice

**d. Port** — Enter the port for the BI Office Server. The default is 80.

**Note:** If your environment is SSL enabled, then see "Configuring SSL" on Oracle WebLogic Server for Oracle BI for Microsoft Office" for the required steps.

If you require security for the data that is passed between the client and server, then host Oracle BI EE on a secured HTTPS server.

- 5. Click Test Connection to test the connection between the Oracle BI Add-in for Microsoft Office and the BI Office Server. (Note that this does not test the connection between the BI Office Server and Presentation Services.)
- **6.** Complete the fields on the General and Logging tabs as appropriate. See the Help for Oracle BI Add-in for Microsoft Office for information on the Preferences dialog.
- **7.** Click **OK** to close the Preferences dialog.

# Setting Properties in the bioffice.xml Configuration File

This section describes the properties that you can configure in the bioffice.xml file. You can modify the contents of this file as needed. Before making any modifications,

ensure that you make a backup copy of the file. After saving modifications to the file, ensure that you restart the BI Office Server.

Following is a sample bioffice.xml file.

```
<br/>dioffice>
<!-- log -->
<!-- LogLevel Never = 1; Error = 2; Warning = 3; Msg = 4; Debug = 5; -->
   cproperty name="LogLevel" type="int">5</property>
   <!-- saw -->
      <!-- property
name="SawBaseURL">http://localhost:9704/analytics/saw.dllperty -->
   <!-- Set SAW version manually: 11 (for 11.1). This is optional. SAW version can
be detected automatically by Office Server. -->
      <!-- <pre><!-- <pre>c!-- c!-- cccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccccc<
   <!-- Does SAW use SSO (Single Sign-On)? Yes = 1; No = 0; -->
      cproperty name="SawUseSSO" type="int">0</property>
   <!-- In SSO case, sawBaseURL is for web service only, sawWebURLforSSO is for
external web request. In none SSO case, sawBaseURL is for both web service and
external web request. -->
     <!-- <pre><!--</pre>
name="SawWebURLforSSO">http://localhost/analytics/saw.dll</property> -->
   <!-- Specify the maximum number of rows to be returned by SAW executeXMLQuery
or fetchNext method. -->
      cproperty name="SawMaxRowsPerPage" type="int">5000/property>
   <!-- Parse hyperlink column? Yes = 1; No = 0; -->
      cproperty name="SawParseHyperLink" type="int">1</property>
   <!-- Parse percentage column? Yes = 1; No = 0; -->
     cproperty name="SawParsePercentageColumn" type="int">1</property>
   <!-- Fetch fresh data? Yes = 1; No = 0; -->
   <!-- Turn on will make SAW re-submits the query to refresh data, instead of
reading data from cache. -->
      cproperty name="SawFetchFreshData" type="int">0</property>
   <!-- Office -->
   <!-- Compress result sent to Office client? Yes = 1; No = 0; -->
      cproperty name="OfficeCompressResult" type="int">1</property>
   <!-- If compress Office result, specify the minimum size (in bytes) to trigger
the compression. -->
      </bioffice>
```

The following table describes the bioffice.xml properties:

| Property Name | Valid Values          | Description   |
|---------------|-----------------------|---|
| LogDir        | N/A                   | Enter the path to the directory for the BI Office Server to write the log file.       |
| LogLevel      | 1 = Never             | Set the level of information you want to be   |
|               | 2 = Error             | written to the log file.  |
|               | 3 = Warning (Default) | Note that as the log level value increases, performance is impacted. Therefore do not |
|               | 4 = Message           | set this property to debug (5) except when  |
|               | 5 = Debug             | troubleshooting an issue.   |

| <b>Property Name</b> | Valid Values   | Description   |
|----------------------|--|---|
| SawBaseURL           | http:// <hostname>:<br/><port>/analytics/saw.<br/>dll</port></hostname>        | Enter the URL for Oracle BI Presentation<br>Services. This property is set initially by<br>the Oracle BI EE installer.  |
|                      | or<br>https:// <hostname>:<br/><port>/analytics/saw.<br/>dll</port></hostname> | Important: If SSO is enabled, then enter the URL for the protected analytics servlet that you deployed when configuring BI Office to integrate with the SSO-enabled Oracle BI Server. The URL that is specified for this property will be used for Web service requests between the BI Office Server and Presentation Services. For more information, see "Configuring an SSO-Enabled Oracle BI EE for Oracle BI for Microsoft Office". |
|                      |  | If SSO is not enabled, then SawBaseURL is the only URL that is required to access Presentation Services.  |
| SawUseSSO            | 0 = No (Default)<br>1 = Yes  | Set this property to 1 if the Oracle BI EE implementation is enabled for SSO.   |
| SawWebURLforSSO      | http:// <hostname>:<br/><port>/analytics/saw.<br/>dll<br/>or</port></hostname> | When SSO is enabled, use this property to enter the public URL that allows external users to access Oracle BI EE via SSO from the Oracle BI Add-in for Microsoft Office.  |
|                      | https:// <hostname>:<br/><port>/analytics/saw.<br/>dll</port></hostname>       | See Oracle Fusion Middleware<br>Administrator's Guide for Oracle Access<br>Manager for information on public URLs<br>and SSO.   |
| SawMaxRowsPerPage    | N/A  | Default setting is 5000, which is acceptable in most cases. Specifies the maximum number of rows to be returned by the executeXMLQuery or fetchNext method in Presentation Services. Increase this setting in a multiple-user environment to reduce the number of calls back to Presentation Services, provided that sufficient memory is available to handle the volume of data.   |
| SawParseHyperLink    | 0 = Off<br>1 = On (Default)  | When set to 1, the BI Office Server parses the HTML content in the results set and converts the content to HTML display format in Excel. When set to 0, the BI Office Server inserts the hyperlink text as is; that is, as text with markup tags. If your data does not include any hyperlink text, then set this property to 0 for better performance.   |

| Property Name                   | Valid Values  | Description  |
|---------------------------------|---|--|
| SawParsePercentageCol<br>umn    | 0 = Off<br>1 = On (Default)                             | In the Analysis editor of Oracle BI EE, if the Column Properties dialog box for a given column is configured as follows: On the Data Format tab, Override Default Data Format is checked and Treat Numbers as Percentage is selected; then setting this property to 1 instructs the BI Office Server to treat the number as a percentage (divide by 100). If the user formats the data as a percentage in Excel, then the data displays correctly. If the property is set to 0, then no percentage processing is done by the BI Office Server. For more information on setting column properties, see "Column Properties dialog".  |
| SawFetchFreshData               | 0 = Off (Default)<br>1 = On                             | Default is 0. Set this property to 1 to resubmit the query to refresh data. When set to 0, the data is read from the Presentation Services cache.  |
| OfficeCompressResult            | 0 = No<br>1 = Yes (Default)                             | This property is turned on by default to compress the analysis result set on the BI Office Server before being sent to the BI Office client. The BI Office client detects this result set as compressed and decompresses the result, transparently to and without any intervention on the part of the user. Define the minimum file size that will trigger the compression in the OfficeCompressResultMinSize property.  |
|                                 |   | Guidelines for setting this property: If the results are expected to be large, (more than 16KB or 32KB), then turn compression on. There is a performance overhead associated with compressing the result set on the server side, and then decompressing it on the client side. The benefit of compression is a significant reduction in the size of the data sent from the server to the client; because the results are usually in the form of XML, which is verbose, compression can shrink the result set by as much as 90%. The cost versus benefit can vary for your environment, therefore some trial and error might be required before achieving the optimal setting. |
| OfficeCompressResult<br>MinSize | Express as an integer in bytes. Default value is 16384. | If the property "OfficeCompressResult" is turned on, then enter the minimum size file in kilobytes that will trigger compression. See the description for the OfficeCompressResult property for guidelines on setting these properties.  |

# Configuring SSL on Oracle WebLogic Server for Oracle BI for Microsoft Office

The following procedure describes how to configure SSL in a standalone Oracle WebLogic Server environment for use with Oracle BI for Microsoft Office on Windows.

#### To configure SSL for Oracle BI for Microsoft Office:

Follow the instructions in Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition to configure SSL for Oracle BI EE.

Oracle BI for Microsoft Office uses the SSL configuration that you enable for Oracle BI EE.

2. Update the SawBaseURL element in the bioffice.xml file of the BI Office Server computer as shown in the follow line, replacing server-name and port-num with the appropriate values:

```
name="SawBaseURL">https://bioffice-server.server-name.com:port-num/analytics/sa
w.dll>
```

**3.** In the Oracle BI Add-in for Microsoft Office on the client computer, create a connection by completing the following fields:

**Name**: Enter a name for the connection, such as My BI Office.

**Office Server**: Enter the server machine name, such as bioffice-server.example.com

**Port**: Enter the port number for the connection.

**Use Secure Sockets Layer (SSL)**: Select this box.

**Tip:** If you can connect to SSL successfully in the browser, yet the connection fails in the client, then confirm that the certificate was exported and imported properly. See Oracle Fusion Middleware Security *Guide for Oracle Business Intelligence Enterprise Edition for information.* 

# Configuring an SSO-Enabled Oracle BI EE for Oracle BI for Microsoft Office

Oracle BI for Microsoft Office currently cannot be fully integrated with Single Sign-On. If the Oracle BI EE implementation is SSO-enabled, users can use their SSO credentials from the Oracle BI Add-in for Microsoft Excel or the Oracle BI Add-in for Microsoft PowerPoint to sign into Oracle BI for Microsoft Office.

For users to perform the Edit View function in Oracle BI for Microsoft Office, you must configure the BI Office Server to route these requests to the public URL for Presentation Services. The user will be challenged for credentials to sign in to Oracle BI EE.

Depending on the server type for Single Sign-on, you might configure SSO slightly differently. The following procedure provides an example of how to integrate Oracle BI for Microsoft Office with an SSO-enabled Oracle BI EE.

#### To configure SSO for Oracle BI for Microsoft Office:

- Follow the instructions in Oracle Fusion Middleware Security Guide for Oracle Business Intelligence Enterprise Edition to configure SSO for Oracle BI EE.
  - Oracle BI for Microsoft Office uses the SSO configuration that you enable for Oracle BI EE.
- 2. On the BI Office Server computer, open the bioffice.xml configuration file for editing.
- **3.** Update the following properties in the file:

- SawBaseURL to point to the analytics-ws servlet that you deployed as part of configuring SSO for Oracle BI EE.
- SawWebURLforSSO to point to the URL that is used for public and external users to access Oracle BI EE.

**Note:** When specifying the URL for SawWebURLforSSO, you can use domain names in the URL. However, note the following special cases:

If the Oracle BI Server, the server for Oracle BI for Microsoft Office, and the client computer are running in different domains, then you must specify the complete domain name. For example, specify:

http://myserver.example.com:443/analytics/saw.dll and not:

http://myserver:443/analytics/saw.dll

- If the Oracle BI Server or the server for Oracle BI for Microsoft Office is running on a computer that has two or more IP addresses configured, then you must specify the correct IP address in the URL for the location of the Oracle BI Server.
- SawUseSSO to indicate that you have enabled SSO for Oracle BI for Microsoft Office and for Presentation Services. Set the value to "1".

The following example shows properties set in the bioffice.xml file for SSO.

```
property
name="SawBaseURL">http://localhost:port/analytics-ws/saw.dll</property>
<!-- Does SAW use SSO (Single Sign-On): yes = 1; no = 0; -->
property
name="SawWebURLforSSO">http://localhost:port/analytics/saw.dll</property>
cproperty name="SawUseSSO" type="int">1</property>
```

See Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager for information on public URLs and SSO.

Save your changes and restart the BI Office Server.

# **Accessibility Features**

This chapter provides information about how to configure and use accessibility features for Oracle BI Enterprise Edition. It contains the following topics:

- "Using Accessibility Features"
- "Keyboard Shortcuts"
- "Designing for Accessibility"
- "Using Objects to Enhance Accessibility"

# **Using Accessibility Features**

This section contains the following topics:

- "What are Accessibility Features?"
- "Signing In via Keystrokes"
- "Changing to Accessibility Mode"

### What are Accessibility Features?

The accessibility features in Oracle BI EE aim to make aspects of navigating and using the product easier for persons with disabilities and for the aging population. The accessibility features support the use of standards-based assistive-technology hardware and software (such as Freedom Scientific JAWS or Microsoft Narrator). The accessibility features are grouped into these general categories:

- Features used by third-party assistive-technology products. These features center on providing a user interface that consists of standard HTML elements that can be easily interpreted by third-party assistive technology products.
- Accessibility mode, as described in "Changing to Accessibility Mode".
- Keyboard shortcuts that make it easier to navigate content for users with limited or no ability to use a mouse.
  - For information, see "Keyboard Shortcuts".
- Content design capabilities that make it possible for content creators to create content that supports users with accessibility needs. While Oracle BI EE provides accessibility mode that offers many features automatically, you as the designer must create content that meets the accessibility requirements of your user community.

For information, see "Designing for Accessibility" and "Using Objects to Enhance Accessibility".

### Signing In via Keystrokes

Use the following procedure to sign into Oracle BI EE using keystrokes rather than the mouse.

#### To sign into Oracle BI EE using keystrokes:

- In a browser, display the Sign In page for Oracle BI EE.
- Press TAB until you place the insertion point in the **User ID** field.
- Enter the ID and press TAB to place the insertion point in the **Password** field.
- Enter the password and if you are ready to complete the sign-in process, then press ENTER to activate the **Sign In** button.
  - If you want to change the language that Oracle BI EE uses, then proceed to the next step.
- Press TAB twice to place the insertion point in the **Language** field.
- Use the arrow keys to select the desired language.
- Press SHIFT+TAB, then press Enter to activate the **Sign In** button.

### Changing to Accessibility Mode

Accessibility mode in Oracle BI EE makes the rendering of the user interface more compatible with screen readers while allowing only that functionality that is supported for users with disabilities to be visible. The following list provides information on accessibility mode:

- The Home page does not contain links for accessing the Administration page or for performing most editing functions, such as for editing dashboards and analyses.
- Analyses are rendered differently on dashboard pages in the following ways:
  - Graphs and map views are not displayed but are instead converted to one or more annotated tables.
  - The following analysis links, which are not useful for the visually impaired, are not displayed: Analyze and Edit.
- Tables and pivot tables are rendered with appropriate internal annotations to enable screen readers to describe the contents of cells.
  - Refer to your assistive technology documentation for all applicable table navigation shortcuts.
- You cannot use the mouse to modify the layout of a table or pivot table.
- The collapse icon is included in the upper-left corner of each section on a dashboard page, even if that section is marked as not collapsible in the Dashboard builder. This allows the icon to be the first element that receives focus when using the keyboard to navigate on a dashboard page.
- If the dashboard page is refreshed, even if you navigate to another page, then the location of the focus is not preserved. You must press TAB to navigate through the focusable items.

By default, Oracle BI EE does not use accessibility mode. Each user can decide whether to enable accessibility mode by using the following procedure.

To enable accessibility mode using keystrokes:

- Sign into Oracle BI EE, as described in "Signing In via Keystrokes".
- Press TAB multiple times to navigate through the global header, until the focus is on your user name in the **Signed In As** area.
- Press ENTER, then TAB to highlight the **My Account** link. 3.
- Press ENTER to display the "My Account dialog".
- Press TAB to select the "My Account dialog: Preferences tab".
- Press TAB to navigate through the fields on the tab until you reach the Accessibility Mode options.
- 7. Use the arrow keys to select the **On** option.
- Press ENTER to save your changes and close the dialog.
- Refresh the page to see it displayed in accessibility mode.

# **Keyboard Shortcuts**

This section provides the following information about shortcuts:

- "Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher"
- "Navigating in Oracle Business Intelligence Dashboards"

### Keyboard Shortcuts for Oracle BI EE and Oracle BI Publisher

Both Oracle BI EE and BI Publisher support standard keyboard shortcuts that are used in many software applications. In addition, both components offer shortcuts to perform tasks that are specific to those components. Table E-1 describes general keyboard shortcuts for use with Oracle BI EE and BI Publisher.

Table E-1 General Keystrokes

| Keyboard Shortcut | Result   |
|-------------------|--|
| CTRL+ALT+G        | Navigates to the first focusable element in the global header, which is the Skip to Content link. This link allows you to bypass the options that are available in the global header and to move to the features that available in the main part of the Home page. |
| CTRL+ALT+D        | Navigates to the Dashboards popup menu in the global header.<br>You can then press ENTER to display a menu from which you select a dashboard to display.   |
| CTRL+ALT+P        | Navigates to the current dashboard page tab, if the tab is displayed. If there is only one page in the dashboard, then the page tab is not displayed.  |
| CTRL+SHIFT+S      | Navigates to the first focusable element in the next section. For a dashboard page, the first element is the collapse icon.  |
| CTRL+SHIFT+ U     | Navigates to the first focusable element in the previous section. For a dashboard page, the first element is the collapse icon.  |
| TAB               | Navigates to the next focusable element.   |
| SHIFT + TAB       | Navigates to the previous focusable element.   |
| Down Arrow        | Navigates to the next menu option.   |
| Up Arrow          | Navigates to the previous menu option.   |
| ENTER             | Triggers the activity, when the focus is already on a link, an image, or a button with an associated URL or activity.  |

Table E-1 (Cont.) General Keystrokes

| Keyboard Shortcut | Result                              |
|-------------------|-------------------------------------|
| ESC               | Closes the menu that has the focus. |

Table E-2 describes keyboard shortcuts for navigating in dashboards in Oracle BI EE and reports in BI Publisher.

Table E–2 Keyboard Shortcuts for Navigating in Oracle BI EE and BI Publisher

| Keyboard Shortcut       | Result  |
|-------------------------|---|
| ALT + Up or Down Arrow  | Opens drop-down and combo boxes.                |
| CTRL + Up or Down Arrow | Shows the next or previous item in a combo box. |

**Note:** If you use Freedom Scientific JAWS or other screen reader programs, then you must first disable the virtual PC cursor before using the keystroke combinations to navigate the dashboard. You must enable the virtual PC cursor at other times, such as when navigating within table objects on a dashboard.

### Navigating on the Home Page

If you display the Home page after signing into Oracle BI EE or by navigating from another location in Oracle BI EE, then you must press CTRL+ALT+G to place the focus on the Skip to Content link in the upper-left corner of the Home page.

#### To navigate on the Home page with keystrokes:

- Sign into Oracle BI EE, as described in "Signing In via Keystrokes".
- Press CTRL+ALT+G to display the **Skip to Content** link in the upper-left corner of the Home page.
- Press one of the following:
  - ENTER on this link to navigate to the default starting location on the Home page, which is the first link in the upper-left corner under the global header.
  - TAB to navigate to the first focusable element in the global header.
- Continue to press TAB to navigate through the elements on the Home page.

# Navigating in Oracle Business Intelligence Dashboards

The following procedure describes one way to navigate a dashboard using keyboard shortcuts. This procedure does not include all keyboard shortcuts and options but serves as an example.

### To navigate dashboards with keystrokes:

- 1. Sign into Oracle BI EE, as described in "Signing In via Keystrokes".
  - If the Home page is displayed first, then use keystrokes to display the dashboard. Press CTRL+ALT+D to navigate to the Dashboards menu in the global header, press ENTER to display the menu, press TAB or the arrow keys to navigate through the dashboard names, then press ENTER on the name of the dashboard that you want to display.

Proceed to the next step.

- If a dashboard is displayed, then proceed to the next step.
- Navigate to the desired dashboard page as follows:
  - Press CTRL+ALT+G to display the **Skip to Content** link.
  - **b.** Press TAB multiple times to navigate through the global header to the tab that corresponds to the first page of the dashboard.
    - If there are no page tabs, then you navigate to the first focusable element on the dashboard page.
    - Press TAB to move through the dashboard pages. After the last page, pressing TAB gives focus to the dashboard page menu.
  - Press ENTER when the focus is on the appropriate page tab to open that page of the dashboard.
- **3.** Press CTRL+SHIFT+S to navigate to the first focusable element in the next section, which is the collapse icon.
- Press TAB to navigate to the next focusable element in the current section.
- Press CTRL+SHIFT+S to navigate to the first focusable element in the next section.
- While the section collapse/expand icon has focus, press ENTER to collapse the current section.
- To navigate in a table or pivot table:
  - **a.** Press TAB to select the table.
  - **b.** Press TAB to move through the headers of the table and to select any menus that exist there.
  - **c.** When the table has focus, press the arrow keys to navigate among the columns and body cells of the table

To access the drop-down menus in the header rows when a body cell has focus, press TAB, then ENTER to display the options for the menu in the first header row. Press TAB and use the arrow keys to highlight the options in the menu and press ENTER to select the desired option.

# **Designing for Accessibility**

When creating content for consumption by a wide variety of users, you must plan to provide support for users with various disabilities. Such support is a legal requirement in many locations throughout the world.

You can follow a number of general guidelines when designing content that will be consumed by a variety of people with differing abilities. These guidelines apply to any content that you create for Oracle BI EE or other applications. You must also be aware of features that are specific to Oracle BI EE that ensure that the content that you provide supports accessibility requirements.

This section contains the following topics on designing for accessibility:

- "Obtaining General Information"
- "Avoiding Common Misconceptions"
- "Following Best Practice Recommendations"
- "Following General Guidelines for Accessible Content"
- "Designing Dashboards that are Accessible"

# **Obtaining General Information**

You can locate information about accessibility across the Information Technology industry in numerous published books. This guide does not intend to duplicate those works. Various standards and legislation are documented, especially as part of the World Wide Web Consortium (W3C) and Section 508 of the United States Rehabilitation Act.

# **Avoiding Common Misconceptions**

Many designers make certain assumptions about technology and accessibility. Some of the more common misconceptions include:

- HTML content automatically equals accessible content.
- Accessible tools automatically create accessible content.
- Automated testing tools can reliably determine accessibility.

None of these assumptions, however, is correct. Developers can create non-accessible content using HTML. A tool that can produce accessible content might not do so by default, or might allow a developer to select options that will turn off the accessible features within existing accessible content. Automated testing tools do not always interact with content the same way end users will. As a result, they can erroneously report accessible elements as non-accessible. Therefore, accessibility is ultimately the responsibility of the content designer. When creating content, designers must be aware of certain common practices to ensure the content is accessible to all users.

# **Following Best Practice Recommendations**

When configuring or creating content for dashboard pages, consider the following best practice recommendations:

- Refrain from using tickers, because they are not supported.
- Reduce the interactivity and the complexity of pages. For example, restrict the number of prompts and drop-down menus, do not use the drill-inline feature for sections, and configure tables to show as many rows as possible.

# Following General Guidelines for Accessible Content

Always consider the fact that multiple disabilities exist and that multiple disabilities might manifest in the same individual. You must also remember that there are varying degrees of certain disabilities (such as the various types of color vision deficiency). Your designs must take all these possibilities into account.

This section contains guidelines on the following general areas of design:

- "Font Selection"
- "Color Selection"
- "Color Contrast"

# Font Selection

Users with low visual acuity will often use screen magnification software to make the screen easier to read. The fonts that you use should be readable even when magnified by accessibility tools by as much as 20 times. Some fonts do not display well when magnified, while others do.

Oracle BI EE dashboards use style sheets to set standard display definitions. Ensure that these style sheets consistently use font selections that magnify well. That way, content creators will automatically default to using fonts that are accessible.

# **Color Selection**

Many different types of color vision deficiency exist, from an inability to see the difference between one common color pair such as red-green (the most common deficiency), all the way to full color blindness where a person can see only varying shades of grey and black. Using only color to convey critical information means that certain users will not be fully aware of all the pertinent information about a subject. And, of course, a blind user will need any information conveyed by color to also be present in an alternate textual format.

As a developer, this means that you must not create any content that provides key information by color alone. One example of a non-accessible design is to denote negative numbers solely by coloring the text red. Another example is a typical "stoplight" indicator where the only context information comes from its color — green for good and red for bad.

**Using Color with Text** You can use color in designs provided that you also include another indication of the same information. For example, you can include a minus sign or parentheses to denote negative numbers in tables and pivots. For stoplight displays, you can add descriptive text or different shaped icons in addition to the color. You can include text such as "Status: good." You can include green circles for "good," yellow triangles for "warning," and red octagons for "bad."

#### **Color Contrast**

Because color vision deficiency can also manifest as an inability to distinguish between subtle shades of similar colors, overall color design of all screen elements must provide a large amount of contrast. You should strive to achieve a minimum of a 4.5:1 color luminosity contrast ratio. For example, use black text on a white background instead of dark grey text on a light grey background.

You can check the following Web sites for assistance:

- This site offers a tool that can test for the proper level of contrast:
  - http://www.paciellogroup.com/resources/contrast-analyser.html
- This site offers a tool for viewing how a Web site is displayed for individuals with various types of color vision deficiency:

```
http://colorfilter.wickline.org/
```

# Designing Dashboards that are Accessible

Use the guidelines in the following sections for designing accessible dashboards:

- "Promoting a Consistent Structure"
- "Keeping Dashboard Pages Simple"
- "Enhancing On-Screen Content"
- "Providing Alternate Displays"
- "Avoiding Prohibited Features"

# Promoting a Consistent Structure

Use the following guidelines to promote a consistent structure for dashboards:

- If multiple dashboards contain similar functions or content, then keep those links or forms in the same place on all dashboards.
- Use the same text and labels for buttons and links that have the same functions or destinations. When graphical elements are used to identify controls, status indicators, or other programmatic elements, ensure that the meaning assigned to each graphical element is consistent throughout the pages of the dashboard.
- Associate the same text with icons and other graphics that are used for the same functions. Graphics cannot be read by assistive technologies, and low-vision users might be unable to discern the meaning of a graphic. Therefore, all graphics must have additional text to describe the functionality.

Graphics must have "ALT text," which is descriptive text associated with the graphic that adequately describes its purpose. This alternate text is specified via the ALT attribute for the element in HTML code. Even if a graphic is present merely for aesthetic purposes and has no functional value, then you must still specify null ALT text (alt="") for its element so that screen readers know that the text should be skipped.

For other graphical elements that do not support creation of ALT text, you should include text fields at the top or side to denote functionality, such as "Select a Display View Below."

# **Keeping Dashboard Pages Simple**

Try to keep dashboard pages simple. Do not try to include too many objects on one page. Include multiple pages that are easy to navigate rather than one page that is cluttered and difficult to navigate.

#### **Enhancing On-Screen Content**

Use the following guidelines to enhance on-screen content for dashboards:

- As you do in graphs to promote a high color luminosity contrast ratio, do not use colored or patterned backgrounds for dashboard pages.
- Use styles that support high contrast between the background and the text, both in the dashboard header area as well as in the tabs on multi-page dashboards.
- Place the most important content at the top of the page so that users of screen readers can access that content without having to navigate the entire screen.

#### Providing Alternate Displays

For displays that are inherently visual, such as interactive GIS maps or audio-video feeds, no method might exist for making these elements directly accessible. When you deploy this kind of content, you must also provide a text-based equivalent display of the same information with similar interaction capabilities. Typically this means either creating an equivalent table or pivot table of the related data (if applicable), or providing a caption and text description in the case of audio-visual content.

#### Including Descriptions for Analyses

Dashboard pages generate explanatory text for objects based on their description fields. Ensure that each analysis that you create includes a short description of its functionality. You specify this description in the **Description** field of the "Save dialog" for the analysis.

# Working with Styles for Dashboards

The overall look and feel of any dashboard is controlled by the set of styles and skins that are available for your Oracle BI EE system. You can work with styles and skins for accessibility, as described in the following sections:

- "Creating Custom Styles and Skins"
- "Applying a Style to a Dashboard"

Creating Custom Styles and Skins You can create custom styles and skins to implement standard settings that support accessibility, such as default font selections, high-contrast color schemes, and so on. You can start by copying and modifying the default styles. By modifying these files, you can select default colors, contrast, and fonts that can benefit users with certain disabilities. See Oracle Fusion Middleware System Administrator's Guide for Oracle Business Intelligence Enterprise Edition for information on working with styles and skins.

Applying a Style to a Dashboard You can set a default style for all dashboards and you can also select a style to apply to an individual dashboard. You might want to create a set of dashboards with content that is specifically optimized for users with accessibility needs. You might also want to apply a special "accessibility" style to one or more individual dashboards for those users who need it.

You specify a style on the "Dashboard Properties dialog" for a particular dashboard.

# **Avoiding Prohibited Features**

Certain features should not be used at all, such as elements that blink with a frequency between 2Hz and 55Hz, or that use excessive animation (such as a "stock ticker" display widget). Ensure that you are familiar with all legally mandated design prohibitions that apply in your locality and avoid including those elements on dashboard pages.

# Using Objects to Enhance Accessibility

This section contains the following topics that provide examples of using objects to enhance accessibility:

- "Switching Content with View Selectors"
- "Using Static Text Objects for Custom HTML Markup"

# Switching Content with View Selectors

In some cases, you might want to create additional content that is specifically optimized for users with accessibility needs. The view selector is a useful tool for providing the most feature-rich content for all user communities.

For example, suppose that you have a view called HR Pie Graph that uses color to show job categories in slices. This graph can be the default view for the dashboard page. You can include a view selector on the page that allows users to select either a table or a graph with cross-hatching instead of color for displaying the data. The graph can also add text elements that display the actual values that each slice represents, can simplify the background grid, and can include a descriptive title.

# Using Static Text Objects for Custom HTML Markup

Screen readers generally use standard HTML markup to provide information for navigating on a page. One of the most commonly used markup tags is the Header tag. The default title view on an Oracle BI EE dashboard will include a Title tag when Accessibility mode is turned on. However, you cannot add other tags to the design of a title view.

You can use the static text view to replace the title view and supply the necessary HTML tag at the same time. Select the **Contains HTML Markup** box in the "Results tab: Static Text editor" and enter the appropriate HTML code. You can access the styles that are contained in the style sheets for your Oracle BI EE system to ensure consistency with the rest of your dashboards.

For example you can create a header for a dashboard that allows you to enter a title marked with the H3 tag and a horizontal rule line underneath. Enter the following HTML code for the static text view:

<H3>My HR Report</H3><HR WIDTH=650 ALIGN=LEFT>

# **Glossary**

This glossary defines terms for Oracle Business Intelligence Enterprise Edition. See also the Oracle Fusion Middleware Master Glossary for additional terms and definitions.

#### action

Provides functionality to navigate to related content or to invoke operations, functions or processes in external systems. You can include actions in analyses, dashboard pages, agents, scorecard objectives, scorecard initiatives, and KPIs.

See also action link.

#### **Action Framework**

The Action Framework is a component of the Oracle BI EE architecture and includes a J2EE application called the Action Execution Service (AES) and actions-specific JavaScript functionality deployed as part of Oracle BI EE. The action framework also includes client-side functionality for creating actions and invoking certain action types directly from the browser.

#### action link

A link to an action that you have embedded in an analysis, dashboard page, scorecard objective, scorecard initiative, or KPI that, when clicked, runs an associated action.

See also action.

# **ADF Business Intelligence Component**

Provides the developer the ability to include Oracle Business Intelligence catalog objects in ADF Applications. This component uses a SOAP connection to access the Oracle BI Presentation Catalog.

#### **Admin Server**

Is part of the WebLogic domain, and runs the processes that manage Oracle Business Intelligence components. The Admin Server contains the Oracle WebLogic Server Administration Console, and Fusion Middleware Control.

See also Fusion Middleware Control and Managed Server.

# **Administration Tool**

See Oracle BI Administration Tool.

#### agent

Enables you to automate your business processes. You can use them to provide event-driven alerting, scheduled content publishing, and conditional event-driven action execution.

Agents can dynamically detect information-based problems and opportunities, determine the appropriate individuals to notify, and deliver information to them through a wide range of devices (e-mail, phones, and so on).

#### aggregate persistence

A feature that automates the creation and loading of aggregate tables and their corresponding Oracle Business Intelligence metadata mappings to enable aggregate navigation.

#### aggregate table

A table that stores precomputed results from measures that have been aggregated over a set of dimensional attributes. Each aggregate table column contains data at a given set of levels. For example, a monthly sales table might contain a precomputed sum of the revenue for each product in each store during each month. Using aggregate tables optimizes performance.

# aggregation rule

In an Oracle BI repository, a rule applied to a logical column or physical cube column that specifies a particular aggregation function to be applied to the column data, such as SUM.

In Presentation Services, users can see the rules that have been applied in the repository. Users can also change the default aggregation rules for measure columns.

# alias table

A physical table that references a different physical table as its source. Alias tables can be used to set up multiple tables, each with different keys, names, or joins, when a single physical table needs to serve in different roles. Because alias table names are included in physical SQL queries, you can also use alias tables to provide meaningful table names, making the SQL statements easier to read.

#### analysis

A query that a user creates on the Criteria tab in Presentation Services. An analysis can optionally contain one or more filters or selection steps to restrict the results.

See also filter and selection step.

#### analysis criteria

Consists of the columns, filters, and selection steps that you specify for an analysis.

See also analysis.

# analysis prompt

A prompt that is added to an analysis. When the user selects a prompt value, that value then determines the content that displays in the analysis containing the prompt, only.

See dashboard prompt and prompt.

#### attribute

The details of a dimension in an Oracle BI repository. Attributes usually appear as columns of a dimension table.

#### attribute column

In Presentation Services, a column that holds a flat list of values that are also known as members. No hierarchical relationship exists between these members, as is the case for members of a hierarchical column. Examples include ProductID or City.

See hierarchical column.

#### **BI** domain

Contains configurable System components (the coreapplication) and Java components (the WebLogic domain), and also includes the Web-based management tools and applications that utilize resources.

A BI domain can be a set of middleware homes spread across one or more physical servers.

See also **BI** instance.

#### **BI** instance

Refers to the System components (coreapplication) of a BI domain

See also **BI domain**.

# **BI** object

A piece of business intelligence content that is created with Presentation Services and saved to the Oracle BI Presentation Catalog. Examples of BI objects include analyses, dashboards, dashboard pages, scorecards, and KPIs.

#### **BI Search**

A search tool that resides outside of Presentation Services. BI Search is available from the Home Page after the Administrator adds a link to the BI Search URL. BI Search provides a mechanism for searching for objects in the Oracle BI Presentation Catalog that is similar to a full-text search engine.

#### bookmark link

Captures the path to a dashboard page and all aspects of the page state.

See prompted link.

#### bridge table

A table that enables you to resolve many-to-many relationships between two other tables.

#### briefing book

See Oracle BI Briefing Books.

#### business model

Contains the business model definitions and the mappings from logical to physical tables. Business models are always dimensional, unlike objects in the Physical layer, which reflect the organization of the data sources. Each business model contains logical tables, columns, and joins.

# **Business Model and Mapping layer**

A layer of the Oracle BI repository that defines the business, or logical, model of the data and specifies the mapping between the business model and the Physical layer schemas. This layer can contain one or more business models.

The Business Model and Mapping layer determines the analytic behavior that is seen by users, and defines the superset of objects available to users. It also hides the complexity of the source data models.

#### business owner

The person responsible for managing and improving the business value and performance of a KPI or scorecard object, such as an objective, cause and effect map, and so on.

#### catalog

See Oracle BI Presentation Catalog.

# cause & effect map

A component of a scorecard that lets you illustrate the cause and effect relationships of an objective.

See also Oracle Scorecard and Strategy Management.

# chronological key

A column in a time dimension that identifies the chronological order of the members within a dimension level. The key must be unique at its level.

#### **Cluster Controller**

A process that serves as the first point of contact for new requests from Presentation Services and other clients. The Cluster Controller determines which Oracle BI Server in the cluster to direct the request to based on Oracle BI Server availability and load. It monitors the operation of servers in the cluster, including the Oracle BI Scheduler instances. The Cluster Controller is deployed in active-passive configuration.

#### column

In an Oracle BI repository, columns can be physical columns, logical columns, or presentation columns.

In Presentation Services, indicates the pieces of data that an analysis will return. Together with filters and selection steps, columns determine what analyses will contain. Columns also have names that indicate the types of information that they contain, such as Account and Contact.

See also analysis, attribute column, hierarchical column, and measure column.

# column filter

See filter.

#### column prompt

A type of filter that allows you to build specific value prompts on a data column to either stand alone on the dashboard or analysis or to expand or refine existing dashboard and analysis filters.

See also **prompt**.

# complex join

A join in the Physical layer of an Oracle BI repository that uses an expression other than equals.

#### condition

Objects that return a single Boolean value based on the evaluation of an analysis or of a key performance indicator (KPI). You use conditions to determine whether agents deliver their content and execute their actions, whether actions links are displayed in dashboard pages, or whether sections and their content are displayed in dashboard pages.

See also action, action link, agent and key performance indicator (KPI).

#### connection pool

An object in the Physical layer of an Oracle BI repository that contains the connection information for a data source.

See also **Physical layer**.

# content designer

The user who creates business intelligence objects such as analyses, dashboards, and scorecards.

#### contextual event action

A pre-delivered action that utilizes the Action Framework to pass content from the business intelligence object to another region on an ADF page.

See also action, Action Framework, and action link.

#### criteria

See analysis criteria.

#### cube

An OLAP (online analytical processing) data structure that lets data be analyzed more quickly and with greater flexibility than structures in relational databases. Cubes are made up of measures and organized by dimensions. Cubes in multidimensional data sources roughly correspond to star schemas in relational database models.

# currency prompt

A prompt that allow the user to change the currency type that displays in the currency columns on an analysis or dashboard.

See also **prompt**.

#### custom view

A component of a scorecard that lets you show a customized view of your business and strategy data.

See also Oracle Scorecard and Strategy Management.

#### dashboard

An object that provides personalized views of corporate and external information. A dashboard consists of one or more pages. Pages can display anything that you can access or open with a Web browser, such as results of analyses, images, alerts from agents, and so on.

# dashboard prompt

A prompt that is added to the dashboard. When the user selects a prompt value, that value then determines the content that will display in all analyses included on the dashboard.

See analysis prompt and prompt.

#### **Dashboard URL**

Used for incorporating or referencing the content of a specific dashboard in external portals or applications. It has a number of forms and optional arguments that can be used to control its behavior.

# data source name (DSN)

A data structure that contains the information about a specific database, typically used by an ODBC driver to connect to the database. The DSN contains information such as the name, directory, and driver of the database.

Connection pool objects in the Physical layer of the Oracle BI repository contain DSN information for individual data sources.

#### database hint

Instructions placed within a SQL statement that tell the database query optimizer the most efficient way to execute the statement. Hints override the optimizer's execution plan, so you can use hints to improve performance by forcing the optimizer to use a more efficient plan. Hints are only supported for Oracle Database data sources.

#### dimension

A hierarchical organization of logical columns (attributes). One or more logical dimension tables may be associated with at most one dimension.

A dimension may contain one or more (unnamed) hierarchies. There are two types of logical dimensions: dimensions with level-based hierarchies (structure hierarchies), and dimensions with parent-child hierarchies (value hierarchies).

A particular type of level-based dimension, called a time dimension, provides special functionality for modeling time series data.

See also hierarchy.

#### dimension table

A logical table that contains columns used by a particular dimension. A dimension table cannot be a fact table.

See also **fact table**.

#### driving table

A mechanism used to optimize the manner in which the Oracle BI Server processes multi-database joins when one table is very small (the driving table) and the other table is very large.

#### **DSN**

See data source name (DSN).

#### event polling table

Event polling tables (also called event tables) provide information to the Oracle BI Server about which physical tables have been updated. They are used to keep the query cache up-to-date. The Oracle BI Server cache system polls the event table,

extracts the physical table information from the rows, and purges stale cache entries that reference those physical tables.

#### **Essbase**

A multidimensional database management system available from Oracle that provides a multidimensional database platform upon which to build business intelligence applications. Also referred to as Oracle's Hyperion Essbase.

#### fact table

In an Oracle BI repository, a logical table in the Business Model and Mapping layer that contains measures and has complex join relationships with dimension tables.

See also dimension table.

#### filter

Criteria that are applied to attribute and measure columns to limit the results that are displayed when an analysis is run. For measure columns, filters are applied before the query is aggregated and affect the query and thus the resulting values.

See also **prompt** and **selection step**.

# foreign key

A column or a set of columns in one table that references the primary key columns in another table.

# fragmentation content

The portion, or fragment, of the set of data specified in a logical table source when the logical table source does not contain the entire set of data at a given level. Fragmentation content is defined by the logical columns that are entered in the **Fragmentation content** box in the Content tab of the Logical Table Source dialog box.

#### **Fusion Middleware Control**

Provides Web-based management tools that enable you to monitor and configure Fusion Middleware components.

#### global header

An Oracle BI Presentation Services user interface object that contains links and options that allow the user to quickly begin a task or locate a specific object within the Presentation Catalog. The global header always displays in the Presentation Services user interface, thus allowing users to quickly access links and search the catalog without having to navigate to the Home Page or Catalog page.

#### Go URL

Used to incorporate specific business intelligence results into external portals or applications. The Go URL is used when you add a result to your favorites or add a link to a request to your dashboard or external Web site. It has a number of forms and optional arguments that can be used to control its behavior.

#### hierarchical column

In Presentation Services, a column that holds data values that are organized using both named levels and parent-child relationships. This column is displayed using a tree-like structure. Individual members are shown in an outline manner, with lower-level members rolling into higher-level members. For example, a specific day belongs to a particular month, which in turn is within a particular year. Examples include Time or Geography.

See also attribute column.

# hierarchy

In an Oracle BI repository, a system of levels in a logical dimension that are related to each other by one-to-many relationships. All hierarchies must have a common leaf level and a common root (all) level.

Hierarchies are not modeled as separate objects in the metadata. Instead, they are an implicit part of dimension objects.

See also dimension, logical level, and presentation hierarchy.

# hierarchy level

In Presentation Services, an object within a hierarchical column that either rolls up or is rolled up from other levels. Corresponds to a presentation level in an Oracle BI repository.

See also **presentation level**.

# home page

Provides an intuitive, task-based entry way into the functionality of Presentation Services. The Home page is divided into sections that allow you to quickly begin specific tasks, locate an object, or access technical documentation.

# image prompt

A prompt that provides an image with different areas mapped to specific values. The user clicks an image area to select the prompt value that populates the analysis or dashboard.

See also **prompt**.

# initialization block

Used to initialize dynamic repository variables, system session variables, and nonsystem session variables. An initialization block contains the SQL statements that will be executed to initialize or refresh the variables associated with that block.

# initiative

Used in a scorecard, an initiative is a time-specific task or project that is necessary to achieve objectives. As such, you can use initiatives that support objectives as milestones as they reflect progress toward strategy targets.

See also objective and Oracle Scorecard and Strategy Management.

# Java components

Fusion Middleware Control components that are deployed as one or more Java EE applications (and a set of resources) and are managed by Node Manager.

See also Node Manager.

# key performance indicator (KPI)

A measurement that defines and tracks specific business goals and strategic objectives. KPIs often times roll up into larger organizational strategies that require monitoring, improvement, and evaluation. KPIs have measurable values that usually vary with time, have targets to determine a score and performance status, include dimensions to allow for more precise analysis, and can be compared over time for trending purposes and to identify performance patterns.

See also Oracle Scorecard and Strategy Management.

#### **KPI** watchlist

A method of distributing KPIs to end users. A watchlist is a collection of KPIs that are built by adding the KPIs stored in the catalog. After a KPI watchlist is built and saved, it is stored as a catalog object and can be added to dashboards and scorecards.

See also key performance indicator (KPI).

#### level

See hierarchy level.

# logical display folder

Folders used to organize objects in the Business Model and Mapping layer. They have no metadata meaning.

# logical join

Joins that express relationships between logical tables. Logical joins are *conceptual*, rather than physical, joins. In other words, they do not join to particular keys or columns. A single logical join can correspond to many possible physical joins.

# logical layer

See Business Model and Mapping layer.

# logical level

In an Oracle BI repository, a component of a level-based hierarchy that either rolls up or is rolled up from other levels.

Parent-child hierarchies have implicit, inter-member levels between ancestors and descendants that are not exposed as logical level objects in the metadata. Although parent-child hierarchies also contain logical level objects, these levels are system generated and exist to enable aggregation across all members only.

See also **dimension** and **hierarchy**.

# Logical SQL

The SQL statements that are understood by the Oracle BI Server. The Oracle BI Server Logical SQL includes standard SQL, plus special functions (SQL extensions) like AGO, TODATE, EVALUATE, and others.

Clients like Presentation Services send Logical SQL to the Oracle BI Server when a user makes a request. In addition, Logical SQL is used in the Business Model and Mapping layer to enable heterogeneous database access and portability. The Oracle BI Server transforms Logical SQL into physical SQL that can be understood by source databases.

#### logical table

A table object in the Business Model and Mapping layer of an Oracle BI repository. A single logical table can map to one or more physical tables. Logical tables can be either fact tables or dimension tables.

See also dimension table and fact table.

#### logical table source

Objects in the Business Model and Mapping layer of an Oracle BI repository that define the mappings from a single logical table to one or more physical tables. The physical to logical mapping can also be used to specify transformations that occur

between the Physical layer and the Business Model and Mapping layer, as well as to enable aggregate navigation and fragmentation.

# **Managed Server**

An individual J2EE application container (JMX MBean container). It provides local management functions on individual hosts for Java components and System components contained within the local middleware home, and refers to the Admin Server for all of its configuration and deployment information.

See also Admin Server and Fusion Middleware Control.

#### measure column

A column that can change for each record and can be added up or aggregated in some way. Typical measures are sales dollars and quantity ordered. Measures are calculated from data sources at query time.

Measure columns are displayed in the Oracle BI repository, usually in fact tables, or in Presentation Services.

#### metadata

Data about data. Metadata objects include the descriptions of schemas (such as tables, columns, data types, primary keys, foreign keys, and so on) and logical constructs (like fact tables, dimensions, and logical table source mappings).

The Oracle BI repository is made up of the metadata used by the Oracle BI Server to process queries.

# metadata dictionary

A static set of XML documents that describe metadata objects, such as a column, including its properties and relationships with other metadata objects. A metadata dictionary can help users obtain more information about metrics or attributes for repository objects.

#### mission statement

A statement in a scorecard that specifies the key business goals and priorities that are required to achieve your vision.

See also Oracle Scorecard and Strategy Management and vision statement.

# multi-database join

A join between two tables in an Oracle BI repository, where each table resides in a different database.

# **Node Manager**

A daemon process that provides remote server start, stop, and restart capabilities when Java processes become unresponsive or terminate unexpectedly.

See also Java components.

#### OCI

See Oracle Call Interface (OCI).

# **ODBC**

See Open Database Connectivity (ODBC).

# object properties

Information about an object and attributes that the owner can assign to an object. Examples of properties include name, description, date stamps, read-only access, and do not index flag.

See also **permissions**.

# objective

A required or desired outcome in a scorecard that forms your corporate strategy.

See also initiative and Oracle Scorecard and Strategy Management.

#### offline mode

In the Oracle BI Administration Tool, a mode where a repository builder can edit a repository that is not loaded into the Oracle BI Server.

#### online mode

In the Oracle BI Administration Tool, a mode where a repository builder can edit a repository while it is available for query operations. Online mode also allows user session monitoring for users connected to the subject areas in the repository.

#### opaque view

A Physical layer table that consists of a SELECT statement. In the Oracle BI repository, opaque views appear as view tables in the physical databases, but the view does not actually exist.

# **Open Database Connectivity (ODBC)**

A standard interface used to access data in both relational and non-relational databases. Database applications can use ODBC to access data stored in different types of database management systems, even if each database uses a different data storage format and programming interface.

#### **OPMN**

See Oracle Process Manager and Notification Server (OPMN).

# **Oracle BI Administration Tool**

A Windows application that is used to create and edit Oracle BI repositories. The Administration Tool provides a graphical representation of the three parts of a repository: the Physical layer, Business Model and Mapping layer, and the Presentation layer.

# **Oracle BI Briefing Books**

A collection of static or updatable snapshots of dashboard pages, individual analyses, and BI Publisher reports. You can download briefing books in PDF or MHTML format for printing and viewing. You also can update, schedule, and deliver briefing books using agents.

#### **Oracle BI JavaHost**

A service that gives Presentation Services the ability to use functionality that is provided in Java libraries to support components such as graphs. The services are provided based on a request-response model.

# **Oracle BI Logical SQL View Object**

Provides the developer the ability to create a Logical SQL statement to access the Oracle BI Server and fetch business intelligence data and bind it to native ADF components for inclusion on an ADF page. This view object uses a BI JDBC connection to the Oracle BI Server.

# **Oracle BI Presentation Catalog**

Stores business intelligence objects, such as analyses and dashboards, and provides an interface where users create, access, and manage objects, and perform specific object-based tasks (for example, export, print, and edit). The catalog is organized into folders that are either shared or personal.

#### **Oracle BI Presentation Services**

Provides the framework and interface for the presentation of business intelligence data to Web clients. It maintains a Presentation Catalog service on the file system for the customization of this presentation framework. It is a standalone process and communicates with the Oracle BI Server using ODBC over TCP/IP. It consists of components that are known as Answers, Delivers, and Interactive Dashboards.

See also ODBC; Oracle BI Server; Oracle BI Presentation Catalog; Oracle BI Presentation Services server.

#### **Oracle BI Presentation Services server**

The Oracle BI Web server that exchanges information and data with the Oracle BI Server.

#### **Oracle BI Publisher**

A J2EE application that provides enterprise-wide publishing services in Oracle Business Intelligence. It generates highly formatted, pixel-perfect reports.

See also **report**.

#### **Oracle BI Publisher report**

See report.

# **Oracle BI repository**

A file that stores Oracle Business Intelligence metadata. The metadata defines logical schemas, physical schemas, physical-to-logical mappings, aggregate table navigation, and other constructs. The repository file has an extension of .rpd. Oracle BI repositories can be edited using the Oracle BI Administration Tool.

See also metadata and Oracle BI Administration Tool.

#### **Oracle BI Scheduler**

An extensible scheduling application for scheduling results to be delivered to users at specified times. It is the engine behind the Oracle BI Delivers feature.

See also **results**.

# **Oracle BI Server**

A standalone process that maintains the logical data model that it provides to Presentation Services and other clients through ODBC. Metadata is maintained for the data model in a local proprietary file called the repository file. The Oracle BI Server processes user requests and queries underlying data sources.

#### **Oracle BI Server XML API**

Provides utilities to create a generic, XML-based representation of the Oracle BI repository metadata. This XML file version of the repository can be used to programmatically modify the metadata. The Oracle BI Server XML API objects correspond to metadata repository objects in an RPD file. These objects are not the same as Oracle BI Presentation Catalog XML objects.

# **Oracle Business Intelligence Web Services**

See Oracle Business Intelligence Session-Based Web Services and Oracle Business Intelligence Web Services for SOA.

# **Oracle Business Intelligence Session-Based Web Services**

An API that implements SOAP. These Web services are designed for programmatic use, where a developer uses one Web service to invoke many different business intelligence objects. These Web services provide functionality on a wide range of Presentation Services operations. These Web services allow the developer to extract results from Oracle BI Presentation Services and deliver them to external applications, perform Presentation Services management functions, and execute Oracle Business Intelligence alerts (known as Intelligent Agents).

See also Oracle Business Intelligence Web Services for SOA.

# Oracle Business Intelligence Web Services for SOA

Contains three Web services, ExecuteAgent, ExecuteAnalysis, and ExecuteCondition, which are hosted by the bimiddleware J2EE application. These web services are designed to enable developers to use third-party Web services clients (for example, Oracle SOA Suite) to browse for and include business intelligence objects in service oriented architecture components.

See also Oracle Business Intelligence Session-Based Web Services.

#### **Oracle Call Interface (OCI)**

A connection interface that the Oracle BI Server can use to connect to Oracle Database data sources. You should always use OCI when importing metadata from or connecting to an Oracle Database.

# **Oracle Process Manager and Notification Server (OPMN)**

A process management tool that manages all System components (server processes), and supports both local and distributed process management, automatic process recycling and the communication of process state (up, down, starting, stopping). OPMN detects process unavailability and automatically restarts processes).

See also **System components**.

#### **Oracle Scorecard and Strategy Management**

A performance management tool that lets you describe and communicate your business strategy. You can drive and assess your corporate strategy and performance from the top of your organization down, or from the bottom up.

#### **Oracle Technology Network (OTN)**

A repository of technical information about Oracle's products where you can search for articles, participate in discussions, ask the user community technical questions, and search for and download Oracle products and documentation.

# parent-child hierarchy

A hierarchy of members that all have the same type. All the dimension members of a parent-child hierarchy occur in a single data source. In a parent-child hierarchy, the inter-member relationships are parent-child relationships between dimension members.

See also dimension.

# parent-child relationship table

A table with values that explicitly define the inter-member relationships in a parent-child hierarchy. Also called a closure table.

# pass-through calculation

A calculation that will not be computed by the Oracle BI Server but will instead be passed to another data source. Enables advanced users to leverage data source features and functions without the need to modify the Oracle BI repository.

#### permissions

Specify which users can access an object, as well as limit how users can interact with an object. Examples of permissions include write, delete, and change permissions.

See object properties.

# perspective

A category in your organization with which to associate initiatives, objectives, and KPIs in a scorecard. A perspective can represent a key stakeholder (such as a customer, employee, or shareholder/financial) or a key competency area (such as time, cost, or quality).

See also initiative, key performance indicator (KPI), objective, and Oracle Scorecard and Strategy Management.

#### physical catalog

An object in the Physical layer of a repository that groups different schemas. A catalog contains all the schemas (metadata) for a database object.

#### physical display folder

Folders that organize objects in the Physical layer of an Oracle BI repository. They have no metadata meaning.

#### physical join

Joins between tables in the Physical layer of an Oracle BI repository.

#### **Physical layer**

A layer of the Oracle BI repository that contains objects that represent physical data constructs from back-end data sources. The Physical layer defines the objects and relationships available for writing physical queries. This layer encapsulates source dependencies to enable portability and federation.

#### physical schema

An object in the Physical layer of an Oracle BI repository that represents a schema from a back-end database.

# physical table

An object in the Physical layer of an Oracle BI repository, usually corresponding to a table that exists in a physical database.

See also Physical layer.

# presentation hierarchy

An object in the Presentation layer of an Oracle BI repository that provides an explicit way to expose the multidimensional model in Presentation Services and other clients. Presentation hierarchies expose analytic functionality such as member selection, custom member groups, and asymmetric queries. Users can create hierarchy-based queries using presentation hierarchies.

In Presentation Services, presentation hierarchies are displayed as hierarchical columns.

See also hierarchical column and presentation level.

# **Presentation layer**

Provides a way to present customized, secure, role-based views of a business model to users. It adds a level of abstraction over the Business Model and Mapping layer in the Oracle BI repository. The Presentation layer provides the view of the data seen by users who build analyses in Presentation Services and other client tools and applications.

See also Business Model and Mapping layer.

# presentation level

In the Oracle BI repository, a component of a presentation hierarchy that either rolls up or is rolled up from other levels. Presentation levels are displayed as levels within hierarchical columns in Presentation Services.

See also hierarchy level and presentation hierarchy.

#### **Presentation Services**

See Oracle BI Presentation Services.

#### **Presentation Services server**

See Oracle BI Presentation Services server.

#### presentation table

An object in the Presentation layer of an Oracle BI repository that is used to organize columns into categories that make sense to the user community. A presentation table can contain columns from one or more logical tables. The names and object properties of the presentation tables are independent of the logical table properties.

#### primary key

A column (or set of columns) where each value is unique and identifies a single row of a table.

#### process instance

A unique process on an individual workstation that is associated with a BI instance.

See also **BI** instance.

# prompt

A type of filter that allows the content designer to build and specify data values or the end user to choose specific data values to provide a result sets for an individual analysis or multiple analyses included on a dashboard or dashboard page. A prompt expands or refines existing dashboard and analysis filters.

The types of prompts are column prompts, currency prompts, image prompts, and variable prompts.

See also column prompt, currency prompt, filter, image prompt, and variable prompt.

# prompted link

Captures the path to a dashboard page and a simplified presentation of the dashboard prompt.

See bookmark link.

#### query

Contains the underlying SQL statements that are issued to the Oracle BI Server. You do not have to know a query language to use Oracle Business Intelligence.

# query cache

A facility to store query results for use by other queries.

# ragged hierarchy

See unbalanced hierarchy.

#### report

The response returned to the user from the execution of a query created using Oracle BI Publisher. Reports can be formatted, presented on a dashboard page, saved in the Oracle BI Presentation Catalog, and shared with other users.

See also analysis.

#### repository

See Oracle BI repository.

# repository variable

See variable.

#### results

The output returned from the Oracle BI Server for an analysis.

See also **analysis**.

#### scorecard

See Oracle Scorecard and Strategy Management.

#### selection step

A choice of values that is applied after the query is aggregated that affects only the members displayed, not the resulting aggregate values. Along with filters, selection steps restrict the results for an analysis.

See also **analysis** and **filter**.

#### session variable

See variable.

# skip-level hierarchy

A hierarchy where some members do not have a value for a particular ancestor level. For example, in the United States, the city of Washington in the District of Columbia does not belong to a state. The expectation is that users can still navigate from the country level (United States) to Washington and below without the need for a state.

See also hierarchy.

#### snowflake schema

A dimensional schema where one or more of the dimensions are partially or completely normalized.

#### SQL

See structured query language (SQL).

#### star schema

A relational schema that allows dimensional analysis of historical information. Star schemas have one-to-many relationships between the logical dimension tables and the logical fact table. Each star consists of a single fact table joined to a set of denormalized dimension tables.

# strategy map

A component of a scorecard that shows how the objectives that have been defined for a scorecard and the KPIs that measure their progress are aligned by perspectives. It also shows cause and effect relationships.

See also Oracle Scorecard and Strategy Management.

#### strategy tree

A component of a scorecard that shows an objective and its supporting child objectives and KPIs hierarchically in a tree diagram.

See also Oracle Scorecard and Strategy Management.

# structured query language (SQL)

A standard programming language for querying and modifying data. Oracle Business Intelligence supports standard SQL-92 with several value-added proprietary extensions.

See also Logical SQL.

# subject area

In an Oracle BI repository, an object in the Presentation layer that organizes and presents data about a business model. It is the highest-level object in the Presentation layer and represents the view of the data that users see in Presentation Services. Oracle BI repository subject areas contain presentation tables, presentation columns, and presentation hierarchies.

In Presentation Services, subject areas contain folders, measure columns, attribute columns, hierarchical columns, and levels.

# System components

Server processes (not Java applications) that are managed by the Oracle Process Manager and Notification server (OPMN).

See also Oracle Process Manager and Notification Server (OPMN).

#### transformation

Work that is performed on data when moving from a database to another location (sometimes another database). Some transformations are typically performed on data when it is moved from a transaction system to a data warehouse system.

# unbalanced hierarchy

A hierarchy where the leaves do not have the same depth. For example, an organization may choose to have data for the current month at the day level, data for the previous at the month level, and data for the previous five years at the quarter level.

See also hierarchy.

# value hierarchy

See parent-child hierarchy.

#### variable

Objects in an Oracle BI repository that are used to streamline administrative tasks and dynamically modify metadata content to adjust to a changing data environment.

Variables are of the following types:

- Repository variables have a single value at any point in time. There are two types of repository variables: static and dynamic.
- Session variables are created and assigned a value when each user logs on. There are two types of session variables: system and nonsystem.

#### variable prompt

Allows the user to select a value specified in the variable prompt to display on the dashboard. A variable prompt is not dependent upon column data, but allows you to manipulate, for example add or multiply, the column data on an analysis.

See also **prompt**.

# virtual physical table

A physical table that is made from a stored procedure or a SELECT statement. Creating virtual tables can provide the Oracle BI Server and the underlying databases with the proper metadata to perform some advanced query requests.

# vision statement

A short statement in a scorecard that describes what your organization wants to become sometime in the future. For example, it might be to become the most successful business in the South America Polypropylene Market.

See also mission statement and Oracle Scorecard and Strategy Management.

# WebLogic domain

Contains Java components that are configured to participate in the servicing of SOAP, HTTP, and other forms of requests.

# WebLogic Scripting Tool (WLST)

A command-line scripting interface that enables you to configure, manage, and persist changes to WebLogic Server instances and domains and to monitor and manage server runtime events.

# **XML API**

See Oracle BI Server XML API.

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