Oracle® Sales Analyzer

User's Guide

Release 11*i*

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Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, please indicate the chapter, section, and page number (if available). You can send comments to us in the following ways:

- FAX: 781-744-0001   Attn: Oracle Sales Analyzer
  Postal service:
  Oracle Corporation
  Oracle Sales Analyzer Documentation
  10 Van de Graaff Drive
  Burlington, MA 01803
  U.S.A.

If you would like a reply, please give your name, address, and telephone number below.

If you have problems with the software, please contact your local Oracle Support Services.

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Preface

What this manual is about

The Oracle Sales Analyzer User's Guide describes how to use Oracle Sales Analyzer, (hereinafter referred to as "Analyzer").

Intended audience

This manual is intended for users who are interested in online analytical processing.

Structure of this document

The Oracle Sales Analyzer User's Guide is structured as follows:

- Part I (Chapters 1 and 2) describes Analyzer features and presents a sample business analysis

- Part II (Chapters 3 through 10) describes how to use Analyzer in a Windows client environment

- Part III (Chapters 11 through 18) describes how to use Analyzer in the Web environment

- Appendix A describes the algorithms that Analyzer uses to calculate forecasts

Related Documentation

Printed documents

The following table lists documentation related to Analyzer.

Document	Description
Oracle Sales Analyzer Installation Guide	Provides instructions for using Oracle Universal Installer to install the Analyzer client and upgrade an existing Analyzer database.
Oracle Sales Analyzer Administrator's Guide	Describes how to set up an Analyzer database for access by Windows client and Web users, customize the database, control the display of data, and modify the user interface.
Oracle Sales Analyzer Data Loader Guide	Provides detailed information about the data loader program, and instructions for building an Analyzer database from flat files that are stored outside of Oracle Express Server databases.
Oracle Express Relational Access Manager User's Guide	Describes Oracle Express Relational Access Manager, and explains fundamental concepts pertaining to data warehouse design and optimization. The guide also provides instructions for using Relational Access Administrator, a graphical utility and component of Relational Access Manager.
Release Notes	Release notes are available online. They highlight information for this release of Analyzer, including release history, new features, product-specific functions, and known problems.

Help files

The documentation set for Analyzer also includes the following Help files:

- Analyzer Help — Online Help for Oracle Sales Analyzer in the Windows client environment

- Database Manager [Analyzer] Help — Online Help for many administrative features of Oracle Sales Analyzer

- Oracle Sales Analyzer HTML Help — Online Help for Oracle Sales Analyzer in the Web environment

Conventions

Text conventions

You will find the following text conventions in this document.

Convention	Usage
Boldface text	Indicates menu items, command buttons, options, field names, and hyperlinks. Bold text is also used for notes and other secondary information in tables (for example, **Result**).
`Fixed-width` text	Indicates file names, operating system commands, and URLs. Also indicates examples and anything that you must type exactly as it appears. **For example:** If you are asked to type `show eversion`, you would type all the characters exactly as shown in the fixed-width font.
Italic text	Indicates variables, including variable text. Variable text is used when dialog boxes or their components are unlabeled or have labels that change dynamically based on their current context. The wording of variable text does not exactly match what you see on your screen. Italic type is also used for emphasis, for new terms, and for titles of documents.
UPPERCASE text	Indicates Express commands and objects and acronyms.

Mouse usage

Always use the left mouse button unless you are specifically instructed to use the right mouse button.

The term "left mouse button" refers to the dominant button. If you have reconfigured your mouse to reverse the functions of the left and right buttons, then you will need to use the reverse button when you follow the procedures in this manual.

Formats for key combinations and sequences

Key combinations and key sequences appear in the following formats.

IF you see the format . . .	THEN . . .
Key1+Key2,	press and hold down the first key while you press the second key.
	For example: "Press Alt+Tab" means to press and hold down the Alt key while you press the Tab key.
Key1, Key2,	press and release the keys one after the other.
	For example: "Press Alt, F, O" means to press and release the Alt key, press and release the F key, then press and release the O key.

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Part I

Introduction to Analyzer

This section describes the features of Oracle Sales Analyzer and provides an overview of Analyzer data concepts and documents. The section also presents a sample business analysis that illustrates how you can use Analyzer to address specific issues.

This section contains two chapters:

- Chapter 1, "Analyzer Basics"
- Chapter 2, "Conducting an Analyzer Business Analysis"

1

Analyzer Basics

Chapter summary

This chapter provides an overview of Oracle® Sales Analyzer.

List of topics

This chapter includes the following topics:

- What Is Analyzer?
- Analyzer Concepts
- Analyzer Documents
- Public and Personal Objects
- Methods of Accessing Analyzer

What Is Analyzer?

About Oracle Sales Analyzer

Oracle Sales Analyzer (hereinafter referred to as "Analyzer") is a decision support application that provides a wide range of tools for ad hoc analysis of corporate data. Analyzer retrieves data from a variety of sources and from local or remote locations. It integrates data into one logical database, and presents requested analyses at the Windows desktop or in a Web browser.

What is Analyzer used for?

Analyzer is used for applications such as:

- Performing in-depth competitive analyses

- Tracking new product introductions and promotional response rates

- Conducting pricing, distribution, and promotion comparisons across geographies

Analyzer is also used for corporate data analyses such as:

- Analyzing income and expense information from a general ledger package, for example, Oracle General Ledger

- Tracking manufacturing inventory

Analyzer Concepts

Components of data organization

A key to using Analyzer is understanding the terms and concepts used to describe data and data organization.

This section briefly discusses the following Analyzer concepts:

- Dimensions

- Dimension values

- Measures

- Hierarchies

- Attributes

What is a dimension?

Dimensions organize data. A dimension acts as an index for retrieving values of a measure. A dimension can be simple, with values that are single text or integer values, or it can be conjoint or composite, with values that are combinations of values from two or more other dimensions.

For example, suppose you want to analyze monthly sales data, reviewing sales in dollars for a number of products in several different sales districts. Assuming the data varies with the month, the product, and the district, you want to be able to identify dollar sales by these three factors. In the Analyzer data model, Dollar Sales is the measure and Product, Month, and District are the dimensions.

Which dimensions can you use in Analyzer?

The following table describes the dimensions that are commonly found in an Analyzer database.

Dimension Name	Description
Measure	Measures represent the data collected across other dimensions. Each measure can be dimensioned by up to ten dimensions. There are three types of measures: ■ Base measures are measures that are physically stored in the database. ■ Inferred measures are measures calculated on the fly using base measures or other inferred measures. ■ Custom measures are measures that you or another user define.
Product	Products are those items and aggregations of items about which data is reported (e.g., computer software and hardware).
Geography or Customer	The Geography dimension is composed of the geographic areas for which data is reported, such as a region (North America) or a territory (Western United States). This dimension can also refer to specific accounts such as "Business World San Jose" or the "Ministry of Finance Paris."

Dimension Name	Description
Time	Time periods are the days, weeks, months, and other time aggregations for which data is reported (e.g., January 2000). The manner in which time periods are organized in your database depends on the data source.
Channel	The Channel dimension is composed of the distribution channels that you employ. The term *channel* refers to any value in the Channel dimension, regardless of its level. For example, "All Channels" and "Direct/Phone" are both considered channels, even though one represents all sales channels combined and the other represents a specific channel.

What is a dimension value?

Dimension values are those individual values that make up a dimension.

For example, January, February, and March are three dimension values for the Time dimension.

What is a measure?

Measures represent the data collected across dimensions. For example, if you use an Analyzer report to review sales in dollars for products in different sales districts, Dollar Sales is the measure. You view results in Dollar Sales by Product, Month, and District.

Analyzer uses the types of measures described in the following table.

Measure Type	Description
Base measures	Measures that are physically stored in the database. Example: Dollar Sales, Unit Sales
Custom measures	Measures that are derived from base measures. Example: Unit Sales Year Ago

What is a hierarchy?

In Analyzer, a hierarchy exists when values within a dimension are arranged in levels, with each level representing the aggregated total of the data from the level below.

An example of a hierarchy in the Geography dimension, with dimension values arranged in five levels, is shown in the following table.

Dimension Value	Level
Regions of the World	Global
Europe	Continents/Regions
France	Countries/Areas
Lyon, France	Cities
Paris, France	Cities
Ministry of Finance Paris	Customers
United Kingdom	Countries/Areas
London, United Kingdom	Cities
Computer Warehouse London	Customers
IBS Computers London	Customers

What is an attribute?

An attribute is a descriptive characteristic shared by dimension values. Attributes do not represent actual stored data, but logical groupings that allow users to select data based on like characteristics.

Analyzer uses the types of attributes shown in the following table.

Attribute Type	Description
Descriptive attributes	Allow you to select diverse dimension values by common characteristics, such as size or color. Example: In a database representing footwear, you might select all boots, sneakers, and slippers that share the same color.
Level attributes	Allow hierarchical levels to serve as attributes. Example: A Product dimension might have the hierarchy levels "vendor," "brand," and so on. If vendor is an attribute, the user could use the vendor level to select all products belonging to a particular vendor.

Analyzer Documents

Reports

Reports display multi-dimensional data in tabular format. You can use reports to view and analyze results, model data, and perform what-if analyses.

The following illustration shows an example of an Analyzer report in the Windows client interface.

Measure (3)						Geography (1)
Channel (1)						Product (9)

Analyzer Report

Hardware and Software Sales -- July 95--March 96

Units Sold ▼	Total Japan					
All Channels ▼	Portable PCs	Desktop PCs	Monitors	Modems/Fax	Memory	CD-ROM
July 1995	378	198	173	46	298	74¹
August 1995	253	414	210	418	150	39(
September 1995	182	355	267	130	206	61²
October 1995	24	206	95	71	102	43²
November 1995	145	89	140	0	160	33(
December 1995	173	107	113	219	84	14²
January 1996	29	235	0	108	0	38²
February 1996	111	116	0	0	140	1²
March 1996	90	13	109	112	202	24²

Graphs

Graphs display multi-dimensional data in graphical format. You can use graphs to show trends and emphasize the degree or rate of change, show part-to-whole relationships, and quickly compare data associated with two measures.

The following illustration shows an example of a horizontal bar graph in the Windows client interface.
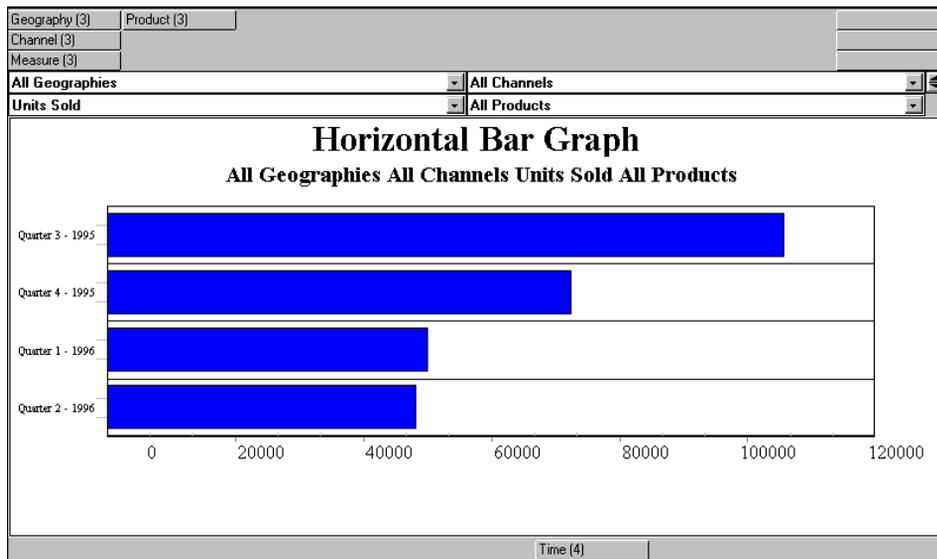
Forecasts

A forecast is an estimate of a measure based on its historic values. Every forecast is based on the assumption that future values of a *time series* (that is, a measure dimensioned by Time) can be derived from past values. Typically, forecasts are used to predict future, unknown measure values. An Analyzer forecast document includes a graph component and a report component.

The following illustration shows how the graph component of a forecast document might appear in the Windows client interface.
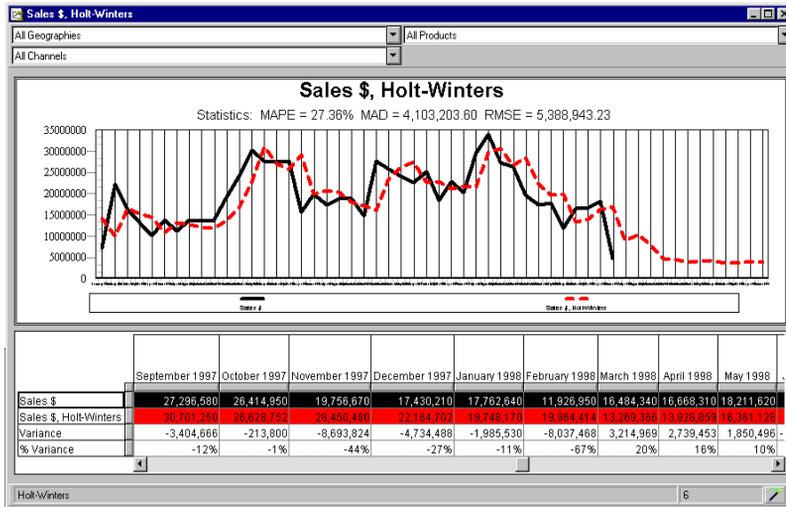
Analysis Library

The Analysis Library is a series of predefined documents that enable you to conduct targeted business analyses along a specific dimension. The Analysis Library is only available through the Web interface.

Following is an example of an Analysis Library report, Sales Above/Below Last Year, for the Geography dimension.

Public and Personal Objects

About personal objects

Personal objects are the Analyzer reports, graphs, forecasts, folders, custom measures, and custom aggregates that you create and save. You can modify or delete any personal object. If you have the proper database access, you can also share personal objects with other users by publishing them to a public library.

About public objects

Public objects are reports, graphs, forecasts, folders, custom measures, and custom aggregates that are available to you, although you did not create them. You might have access to a public object because your DBA has distributed it to you, or because another user has published it to a public library to which you have access.

Although you can modify a public object, you cannot save the modification unless, as in the case of documents, you save the document under another name. Also, you cannot delete public objects.

Methods of Accessing Analyzer

Two options: Windows and Web

You can access Analyzer from the standard Windows client interface or by using a Web browser. With either method, you can access authorized databases and use Analyzer's analytic tools.

Using the Windows client

For information on using the Windows client, see Part II of this manual.

Using the Web interface

For information on using the Web interface see Part III of this manual.

2

Conducting an Analyzer Business Analysis

Chapter summary

This chapter provides an example of how you might use Analyzer to perform a business analysis that contributes information to sales and marketing strategy. Although the information applies to both Windows and Web clients, the examples reflect the Windows client environment.

List of topics

This chapter includes the following topics:

- Introduction
- Beginning an Analysis
- Setting the Groundwork for Your Analysis
- Using Analyzer Tools to Fine-Tune Your Analysis
- Viewing Your Data in a Different Format
- Changing Your View of the Data
- Conclusions

Introduction

What is your role in the analysis?

In this analysis you assume the role of a market analyst for the Global Computing Company, a distributor of computer hardware and software components. You are involved in evaluating and developing the company's sales and marketing strategies.

What is the event that requires an analysis?

There is an historical cause and an actual business event that provide the motivation for you to begin a market analysis. These are described following:

- Historically, Global Computing Company sales have been low in the third quarter (July through September).

- In 1997, the company tried to compensate for the poor first quarter results and increase its annual sales by offering a special discount program for high-volume purchases during the third quarter of 1997.

What direction will your inquires take?

Following are the stages of your analysis:

1. You want to review the performance of your accounts for the year 1997, paying special attention to the discount period.

2. You want to review the first two quarters of 1998 to see whether the discount program had any carry-over effects.

What are you trying to find out?

Here questions that you want to answer in each stage of the analysis:

- Did sales increase for the year with the discount period in comparison with previous years?

- Did sales increase during the discount period in comparison with the same period in previous years?

- Did all your accounts take advantage of the discount?

- Did the discount program produce increased profit growth?

Beginning an Analysis

Deciding which data to examine

Before you create Analyzer documents, you need to decide which data you want to see.

For Global Computing Company, you want to review these categories of data:

- Sales totals for all the individual products and families of products you distribute

- Sales totals for comparative time periods

- Sales totals for geographies, which comprise regions, territories, and customers

- Sales totals for the different channels through which customers buy your products

Using Analyzer dimensions and measures to examine data

To take full advantage of Analyzer's OLAP capabilities, you need to think of how Analyzer organizes data. Analyzer helps you to perform an analysis by examining the data for measures and dimensions.

For example, consider the following business problem: "How many units of Portable PCs did customers in the eastern United States buy directly through e-mail in the first two quarters of 1997 and 1998?"

The following table shows how the components of the business problem above map to Analyzer dimensions and measures.

Component	Dimension/Measure
In *units sold*	Measure value
how many *Portable PCs*	Product dimension value
did customers in the *eastern United States*	Geography dimension value
buy directly through *e-mail*	Channel dimension value
in the *first two quarters of 1997 and 1998*?	Time dimension value

Setting the Groundwork for Your Analysis

Deciding which documents you will need

You first must decide what combination of reports, graphs, forecasts you will use to display the results of your analysis.

Selecting dimension values and measures for your document

When you create a new document in Analyzer, you need to select dimension values and measures. For Global Computing, you want to start by viewing reports that show annual sales for two one-year periods. You want to see if there was an increase in sales caused by the discount program.

Selecting dimension values for the first report

For the first report, you use the Selector dialog box to select products, geography, and channel at the Total Products, Total Geographies, and Total Channels level.

You select three Time dimension values: 1995, 1996, and 1997.

Selecting measures for the first report

Your initial interest is viewing dollar sales, the amount of customer discounts, and dollar sales minus customer discounts, so the measures you select are Sales $, Customer Discount, and Sales Less Discount.

Arranging layouts for your documents

Once you have created a report, you need to arrange a report layout. The layout of a report determines the following things:

- The number of pages the report has
- The pages on which particular dimensions are displayed
- Whether the data for a dimension is displayed in rows or columns

For Global Computing, you initially want to be able to view information for three measures for three years for all products, geographies, and channels. You need a report showing the three measures and three years on the same page.

To arrange the layout of your first report, follow these steps:

1. Move the Measure dimension tile to be a row tile.

2. Move the Time dimension tile to be a column tile.

3. Move the Geography, Product, and Channel dimension tiles to be page tiles.

The following figure shows the first report of your Global Computing analysis.

Channel (1)				Time (3)
Geography (1)				
Product (1)				

Analyzer Report

	1995	1996	1997
All Channels ▾			
All Geographies ▾			
All Products ▾			
Sales $	178,492,200	271,908,600	287,766,100
Customer Discount	5,603,728	8,128,913	13,850,640
Sales Less Discount	172,888,500	263,779,700	273,915,500

Measure (3)

Interpreting the first report

What does the data show?

The data in your first report shows two clues:

■ Dollar Sales and Sales Less Discount increased for 1997 compared to 1996.

■ The rate of increase was not as great in 1997 as it was in 1996.

What conclusions can you reach from the data?

The rate of increase raises questions about the effectiveness of the third-quarter discount you initiated.

What is the next step?

You decide to create a second report and add a custom measure to track the percentage change in Sales Less Discount. If the rate of increase was not as great in 1997 as it was in 1996, you will want to look more closely at the results of the discount.

Using Analyzer Tools to Fine-Tune Your Analysis

Refining an ongoing analysis

Analyzer has many tools, such as the Selector, and the facilities for creating custom aggregates and custom measures, that enable you refine a business analysis while it is in progress.

Creating a custom measure

Because there is no measure for "percentage change in sales less discount" in your database, you must create a custom measure.

You define the measure as a *percent change* measure in which Sales Less Discount is the measure and the time comparison is between the current period and one year ago.

The following figure shows the Maintain Measures dialog box containing the specifications for the custom measure % Change Sales Less Discount.

Using a custom measure in the Selector

You use the Selector to add the custom measure you created to the Measure dimension on your first report. When you choose **OK** in the Selector, your report is re-run.

This is the second report in your analysis, which focuses on the effect of your discount.

Interpreting the second report

What does the data show?

The report shows that your percentage increase in sales less discount decreased from 52.57 percent to 3.84 percent.

What conclusions can you reach from the data?

The discount that you instituted did not produce the results you hoped for.

What is the next step?

You want to get a more detailed view of sales by reviewing sales data by time period.

Viewing Your Data in a Different Format

What are the advantages of a graphical format?

At this point in your analysis, you want to examine sales data from 1996, 1997, and early 1998 in small increments of time. You want to be able to quickly view any deviation from the normal sequence of sales peaks and valleys. A line graph gives you a good view of trends over time.

Creating a graph from your active report

By using the **Copy from Active Window** option in the New dialog box, you can create a graph from the active report. You can see the same dimension selections, but in a different format.

The following figure is the line graph you created from your active report. The Time dimension is the X-axis tile, the Measure dimension is the page tile, and the Product, Geography, and Channel dimensions are the legend tiles.
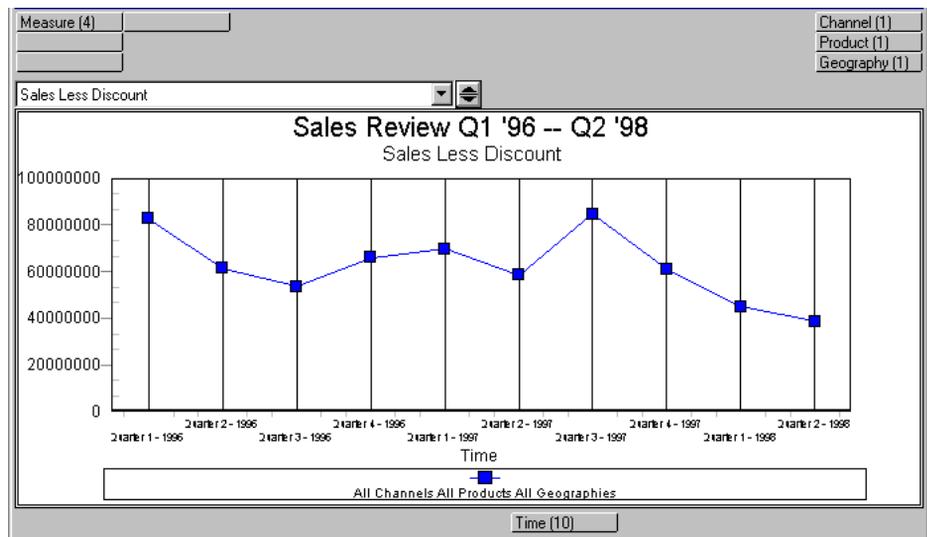
Interpreting the line graph

What does the data show?

The line graph shows the following results:

- There was a spike in profits in the third quarter of 1997.

- Fourth quarter results for 1997 were not as good as fourth quarter results for 1996,

- First and second quarter results for 1998 were far lower than first and second quarter results for 1997 and 1996.

What conclusions can you reach from the data?

The possible cause of the lower sales figure is that some of your customers advanced their normal purchases to take advantage of the discount, thus lowering your sales for the first two quarters of 1998.

What is the next step?

The next step is to determine which customers purchased the most in the third quarter of 1997, and examine their purchasing patterns relative to the third quarter of 1996 and the first and second quarters of 1998.

Changing Your View of the Data

Focusing your analysis

Your analysis has now narrowed to these two questions:

- Did the customers who purchased the most during the third quarter of 1997 significantly increase their purchases compared to the same quarter in the previous year?

- Did the customers who purchased the most during the third quarter of 1997 decrease their purchases in the first two quarters of 1998 in comparison with the first two quarters of the previous year?

Switching report types to look at different data

The way to answer these questions is to switch from the ad hoc report you have been using to a ranking report type.

The ranking report will rank customers according to their purchases for the time periods you specify.

Creating a custom aggregate

To make it easier to look at the time periods that you want to focus on, you can create custom aggregates that combine the data for the first two quarters of 1997 and the first two quarters of 1998 into a single value for each of the quarters.

You create a custom aggregate in the Custom Aggregates dialog box.

The following figure shows the Custom Aggregates dialog box with specifications for creating a custom aggregate for Winter '98 that combines the first two quarters of 1998.
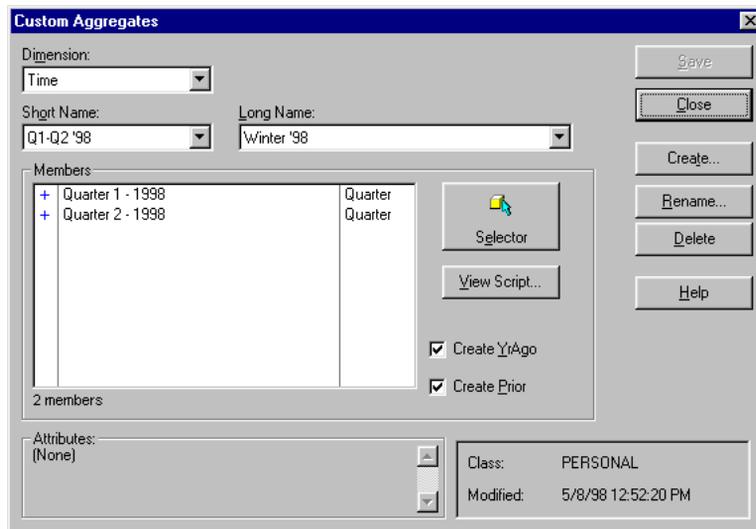
Creating a ranking report

You now want to rank your customers by how much they purchased in a particular time period. You create a ranking report by choosing **Ranking/Exception** from the Report menu while your ad hoc report is the active window.

Note: Ranking/Exception is not an available option if Measure is in the down dimension of your report. if this is the case, swap the Measure tile with another dimension tile, then choose Ranking/Exception from the Report menu.

Selecting dimension values

You want to look at the top ten and bottom ten customers for the third quarter of 1997. Since you are reviewing information for individual customers, you select Geography dimension values at the Customer level.

Then you select dollar sales as the measure.

Arranging the layout

You make Geography the row dimension and Time the across dimension. Measure, Product, and Channel are page dimensions.

The following figure shows the Ranking and Exception Setup dialog box with specifications for the ranking report on sales by customer.
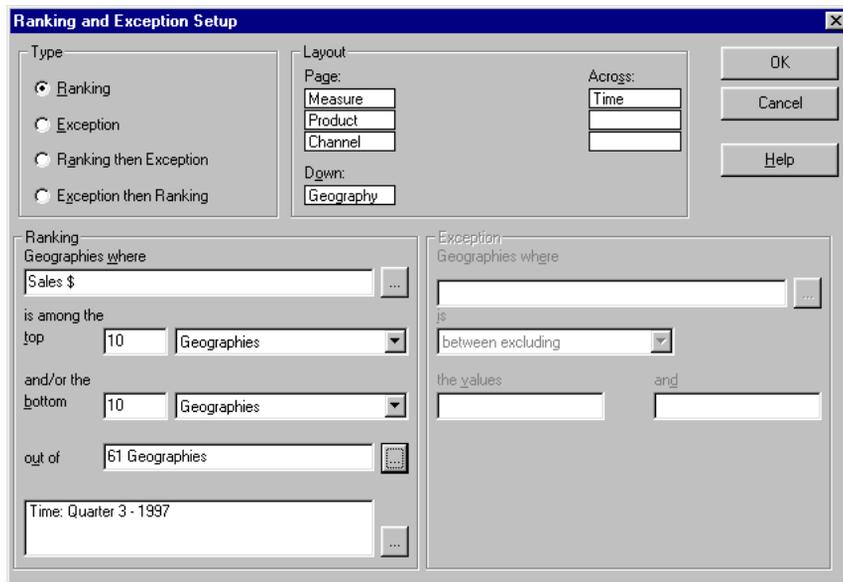
The following figure shows a page of your resulting ranking report.

Measure (4)				Time (4)
Product (1)				
Channel (1)				

Analyzer Report

Sales $				
All Products				
All Channels	Quarter 3 - 1996	Quarter 3 - 1997	Winter '97	Winter '98
1. Business World Hamburg	1,593,091	3,762,821	4,009,546	3,237,743
2. Ministry of Intl. Trad Nagano	1,114,179	3,266,695	3,044,402	2,284,659
3. KLM Enterprises Tokyo	1,323,814	3,210,012	6,011,203	4,089,241
4. Bavarian Indust, GmbH Munich	2,052,472	2,925,052	4,488,527	2,766,665
5. Business World New York	551,612	2,901,585	2,224,028	923,369
6. KLM Enterprises Rome	1,144,299	2,502,379	2,513,618	953,329
7. KLM Enterprises Madrid	917,784	2,226,712	2,536,041	1,001,473
8. Computer Warehouse Detroit	890,828	2,210,547	3,144,803	1,833,704
9. Computer Warehouse Singapore	1,541,601	2,201,473	3,131,955	1,201,158
10. Computer Whse Services San Jose	1,273,478	2,195,939	2,599,033	972,044
52. LA Dept. of Labor New Orleans	817,051	888,591	1,832,905	2,105,890
53. IBS Services Atlanta	875,371	873,750	1,825,335	858,457
54. Global SAC Sacramento	1,028,823	681,754	4,035,475	1,445,361
55. Warren Systems Iselin	296.426	27.239	434.783	310.499

Geography (20)

Settings...

Interpreting the ranking report

What does the data show?

The ranking report shows the following results:

- Customers who purchased the most in the third quarter of 1997 (second column) increased their purchasing significantly in comparison with the third quarter of 1996 (first column).

- These same customers decreased their purchases in the first two quarters of 1998 (fourth column).

What conclusions can you reach from the data?

The sales data indicate that the third-quarter discount helped to increase sales in 1997, but may have led to decreased sales for the first two quarters of 1998.

It may be that larger customers took advantage of the discount by buying in the third quarter of 1997 what they would have bought anyway in 1998. At the same time, smaller customers seem not to have taken advantage of the discount program.

What is the next step?

For our purposes, it's time to summarize what we have learned. In a real business analysis, you would probably continue your investigation.

You could, for example, use Analyzer to look into several questions that arose from what you learned in this analysis:

- You could use Analyzer to determine whether the large customers used the discount program to buy certain product families (e.g., Portable PCs).

- You could use Analyzer to determine whether the effects of the discount program were greater for certain territories.

Conclusions

Introduction

The analysis began with a series of questions. Throughout the course of the analysis, the answers to those questions have become apparent.

Analysis summary

The following table summarizes the results of the analysis.

Question	Answer
Did sales increase for the year with the discount period in comparison to other years?	Sales increased for 1997 in comparison with 1996. Profits also increased, but the increase in profits for 1997 was not as great as the increase for 1996.
Did sales increase during the discount period in comparison to the same period in previous years?	Sales greatly increased during the discount period in comparison with the third quarter of 1996.

Question	Answer
Did all your accounts take advantage of the discount?	The large accounts took advantage of the discount during the third quarter of 1997. At the same time, however, they decreased their purchasing for the first two quarters of 1998. The smaller accounts did not take advantage of the discount.
Did the discount program produce increased profit growth?	Profit growth declined in 1997 compared to 1996. Global Computing had a profitable 1997, perhaps aided by the discount program.
Was the discount program profitable and if not, why not?	The company appears to be facing decreasing sales and profits for 1998, perhaps another consequence of the discount program.

Part II

Using the Analyzer Windows Client Interface

This section describes how to use the Oracle Sales Analyzer Windows client interface.

This section contains the following chapters:

- Chapter 3, "The Windows Client Environment"

- Chapter 4, "Creating Reports and Graphs in the Windows Client Environment"

- Chapter 5, "Customizing Documents in the Windows Client Environment"

- Chapter 6, "Using the Selector in the Windows Client Environment"

- Chapter 7, "Manipulating Data in Windows Client Documents"

- Chapter 8, "Managing Information in the Windows Client Environment"

- Chapter 9, "Adding Calculations to Windows Client Reports"

- Chapter 10, "Creating and Using Forecasts in the Windows Client Environment"

3

The Windows Client Environment

Chapter summary

This chapter presents the basic components of the Windows client environment.

List of topics

This chapter includes the following topics:

- Starting Analyzer
- Analyzer Window
- Report Window
- Graph Window
- Forecast Window
- The Director Window
- Using the Analyzer Help System

Starting Analyzer

Before you begin

Before you use Analyzer, you must set up a database definition for each database with which you will work. You can use Application Manager to define a database, or your DBA might perform this task for you.

When you set up a database, you specify the following types of information:

- If your data is stored on your hard drive, you need only to specify a name for the database and the database configuration file when you define a database.

- If your data is stored on a remote computer, you must provide a name for the database, specify the database configuration file, and indicate the method by which you want to communicate with the remote computer.

When you define the database setup in Application Manager, you can create an icon for the database you are setting up. You can also specify that the icon be used to start Analyzer. This allows you to start Analyzer in a single step.

Methods of starting Analyzer

The three methods of starting the Analyzer Windows client are as follows:

- If there is a database icon on your desktop, you can start Analyzer by clicking on this icon. This is the most efficient method of starting Analyzer.

- You can start Analyzer by clicking on the icon or Start menu item created by the installation program.

- You can open a database in Application Manager and use the Open Database dialog box to start Analyzer. You can also use the Auto Open option to specify that Analyzer is started automatically whenever the database is opened in Application Manager. This is the most resource-intensive method.

Related information

Search for the following topics in the Application Manager Help system:

"Creating Database Icons"
"Defining Communication Setups"
"Defining Database Setups"
"Editing Configuration Files"

Analyzer Window

Definition: Analyzer window

The Analyzer window is an application window. It contains a title bar and a menu bar. It can also contain document windows and other optional components.

The components of the Analyzer window are described in the following table.

Component	Description
Document windows	Document windows can contain reports, graphs, or forecast documents.
Edit bar	Has an area for modifying report and graph text components such as titles, labels, and footnotes. You also use the edit bar to construct and edit formulas that you embed in reports to perform calculations.
Menu bar	Displays Analyzer menus.
Status bar	Displays status messages when you start Analyzer. In the case of forecasts, displays the method and parameters used.
Title bar	Displays "Analyzer" as the name of the application that is running and the name of the database in which you are working. If a document is maximized, the title bar also displays the document name.
Toolbar	Provides you with quick access to commonly used Analyzer functions through a set of buttons.

Example: Analyzer window

This is a sample Analyzer window.
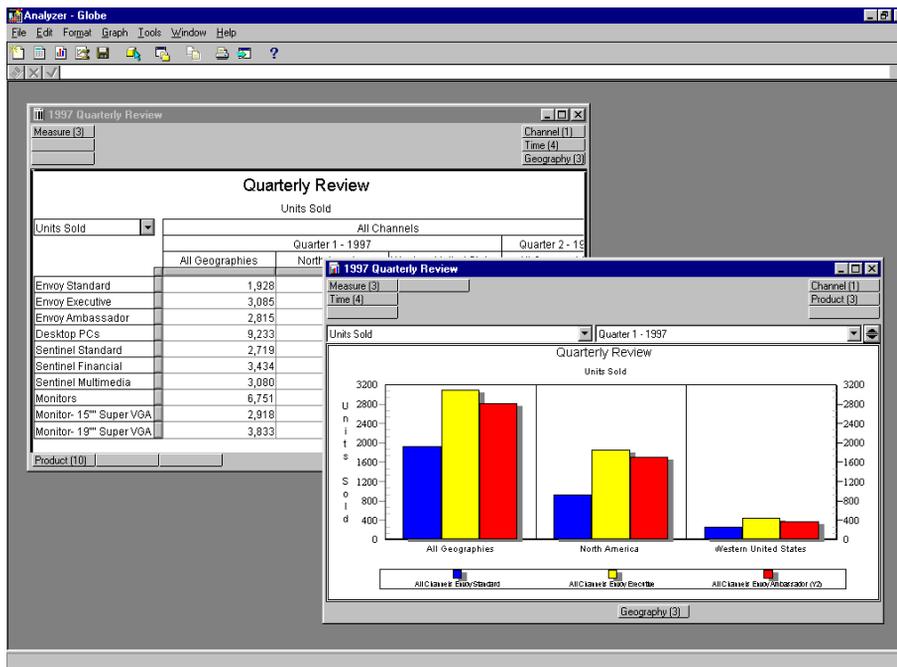
Setting Analyzer options

You specify which options should be displayed in the Analyzer window by using the General tab of the Options dialog box.

This is the Options dialog box.
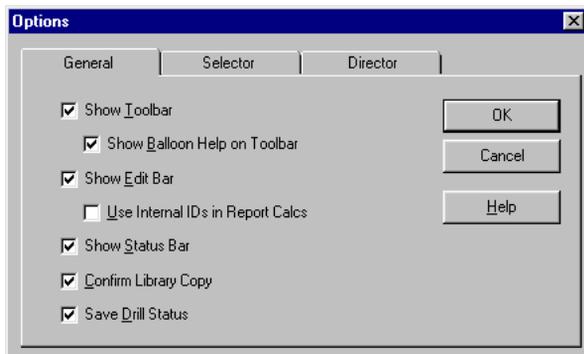
Customizing the Analyzer window

You can customize Analyzer window menus and toolbars by using the Customize dialog box

You can customize Analyzer windows in these ways:

- Add, rename, and hide menu items

- Add and delete toolbar buttons

- Create custom menu items and toolbar buttons to open documents or run Personal Express programs and Windows applications

Related information

Search for the following topics in the Analyzer Help system:

"Customizing the Analyzer Toolbar"
"Setting Analyzer Options"

Report Window

Definition: Report window

An Analyzer report window contains a report that features the following standard components: rows, columns, and body of data.

You use controls in the Report Options dialog box to specify options that aid in the interpretation of data, but do not have to be displayed.

This is the Report Options dialog box.
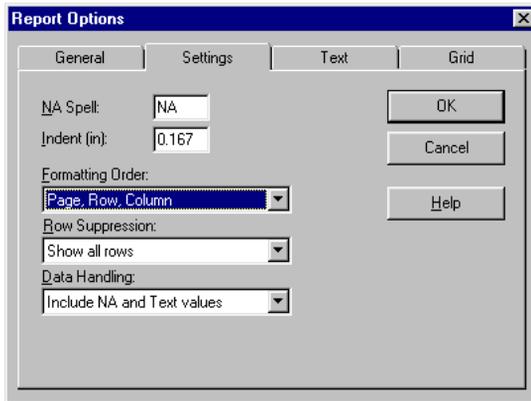
What is in a report?

The following figure illustrates both standard and optional report components.
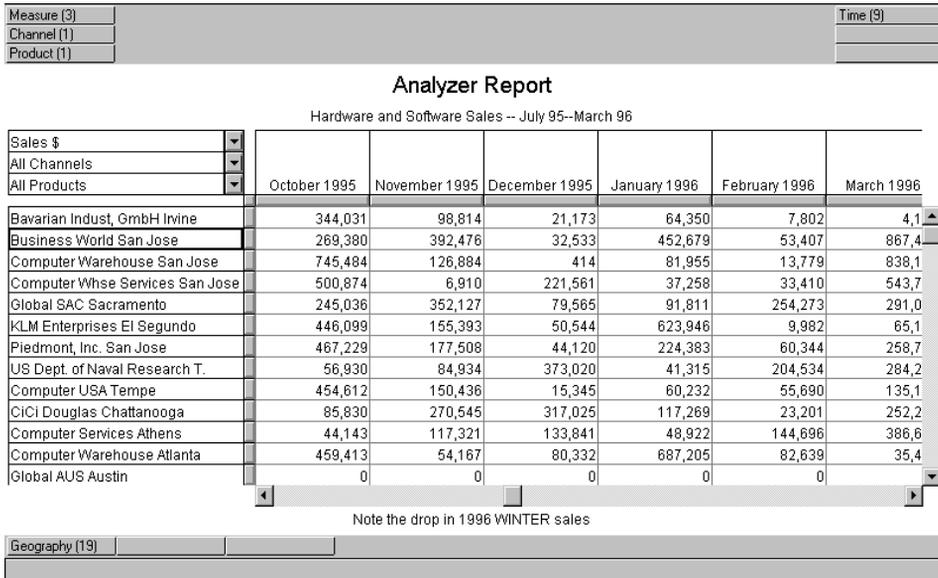
Components of report window

The components of the report window are described in the following table.

Component	Description
Body	Contains cells of measure values that are associated with dimension values that appear in the report.
Columns	Separate dimension values arranged horizontally. Column labels identify dimension values that run across a report.
Footnote	Optional component that contains descriptive text that you want to display.
Highlighters	Let you select a portion of a report for purposes of formatting it or copying it to the Clipboard.
Gridlines	They separate the cells in the body of the report.
Page controls	Let you change the layout of a report. When you select a different dimension value in a page control, the report changes, giving you a different view of your data.
Rows	Separate dimension values arranged vertically. Row labels identify dimension values that run down a report.
Status bar	Displays information related to the current report, such as the criteria for a ranking and exception report.
Subtitle	Displays the subtitle of a report. Optional.
Tiles	Let you rearrange the layout of a report. Each dimension that appears in a report is represented by a tile.
	An Analyzer report contains column tiles, page tiles, and row tiles.
Title	Displays the title of a report. You can specify whether or not to display titles.

Related information

Search for the following topics in the Analyzer Help system:

"Arranging Layouts in Reports"
"Changing Titles, Subtitles, and Labels in Reports"
"Dimension Tile Panels for Reports"
"Highlighting Rows and Columns in Reports"
"Page Controls for Reports"

"Report Windows"
"Row and Column Labels"
"Row, Column, and Body Highlighters"
"Titles and Subtitles for Reports"
"Using Report Options"

Graph Window

Definition: Graph window

All Analyzer graph windows feature standard components, such as data markers. Other components are specific to certain graph types.

Other window components aid in the interpretation of data, but do not have to be displayed. You use controls in the Graph Options dialog box to specify those options that you want to display in a graph.

This is the Graph Options dialog box.
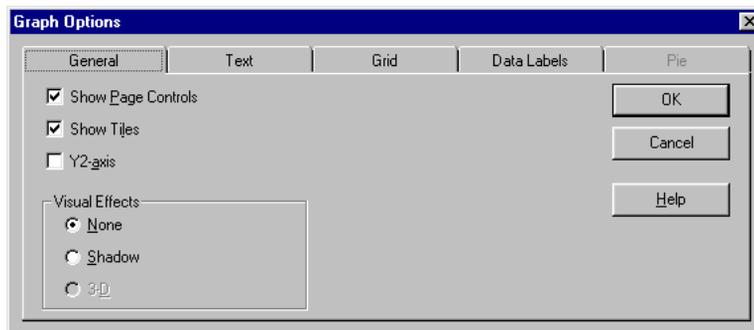
What is in a graph?

This figure illustrates both standard and optional graph components.
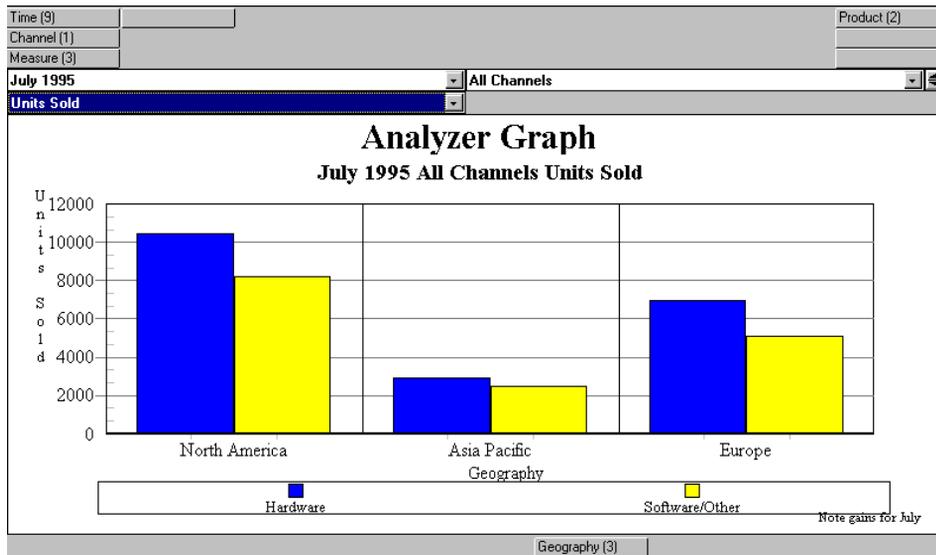
Components of graph window

The components of the graph window are described in the following table.

Component	Description
Axes	Serve as the major reference point for plotting graph data (for area, bar, line, bar-line, and scatter graphs). In vertical bar, line, and bar-line graphs, the X-axis is the horizontal axis and the Y-axis is the vertical axis.
	If there are two Y-axes, the axis on the left of the graph is referred to as Y1, and the axis on the right is referred to as Y2.
	If there are two X-axes, the axis along the bottom of the graph is referred to as X1, and the axis along the top of the graph is referred to as X2.
Axis titles	Identify the values that run along the axes of an area, bar, bar-line, line, or scatter graph.

Component	Description
Data markers	Are represented as areas (in area graphs), bars (in bar graphs), lines (in line graphs), slices (in pie graphs), or data points (in scatter graphs).
Footnote	Optional component that contains descriptive text that helps identify the graph or describe its data.
Gridlines	Optional components that delineate information along the axes of an area, bar, bar-line, line, and scatter graph.
Legend	Identifies the patterns, colors, or symbols associated with data markers.
Page controls	Let you change the contents of a graph. When you select a different dimension value in a page control, the graph appearance and your view of the data change.
Subtitle	Optional component that displays the subtitle of a graph.
Tick labels	Identify the values that run along the axes of an area, bar, bar-line, line, or scatter graph. The tick labels are a subset of the values identified by the axis title.
Tick marks	Are small lines that intersect and correspond to values along an axis. Feelers in a pie graph are equivalent to tick marks in an area, bar, bar-line, line, or scatter graph.
Tiles	Let you rearrange the layout of a graph. Each dimension that appears in a graph is represented by a tile. In an Analyzer graph, there are three sets of tiles: ■ Axis tiles — Represent the dimensions that run along the X-axis in an area, bar, bar-line, line, or scatter graph. ■ Legend tiles — Represent the dimensions that are displayed in the graph legend. ■ Page tiles — Represent the dimensions that appear on a page of a graph.
Title	Displays the title of a graph.

Related information

Search for the following topics in the Analyzer Help system:

"Arranging Layouts in Graphs"
"Assigning Axis Options in Graphs"
"Dimension Tile Panels for Graphs"
"Graph Windows"

"Page Controls for Graphs"
"Titles and Subtitles for Graphs"
"Using Graph Options"

Forecast Window

Definition: Forecast Window

An Analyzer forecast contains a graph and a report, and is designed to help you evaluate a forecast. It retains some, but not all, of the capabilities of both graphs and reports.

You use the Forecast Options dialog box to specify options that do not have to be displayed, but that help clarify the information presented.

This is the Forecast Options dialog box.
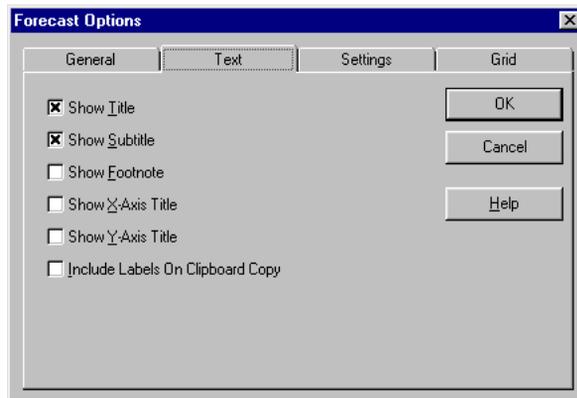
What is in a forecast?

The following figure illustrates the components of the forecast window.
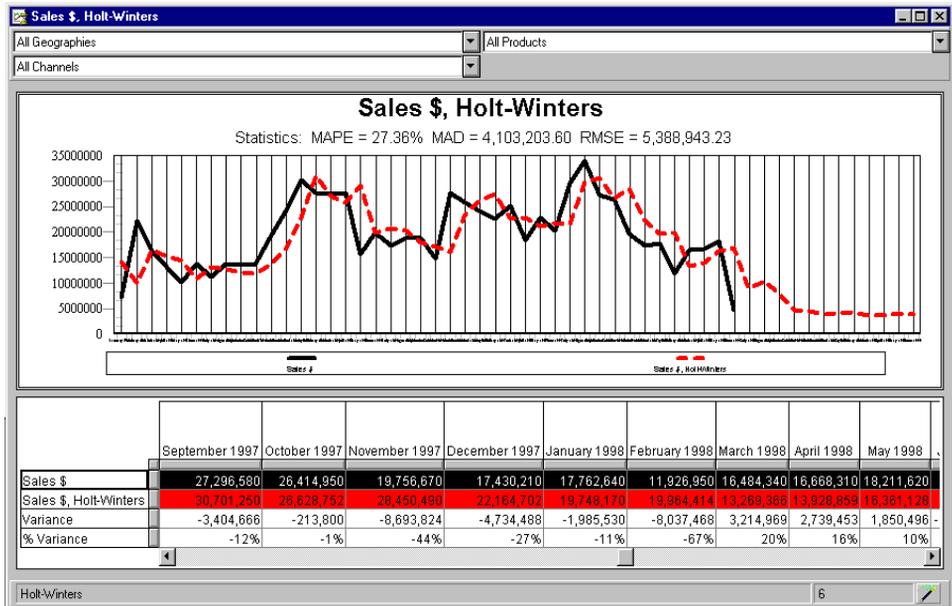
Components of Forecast window

Forecasts have unique components beyond those specific to reports and graphs, as outlined in the following table.

Component	Description
Summary statistics	Displays descriptive statistics for the current set of dimension values, as indicated in the page controls.
Forecast graph	A line graph of a measure and its forecast. The graph type cannot be changed. The layout is fixed. The Time dimension is displayed on the X-axis, and the Measure dimension is displayed on the Y-axis.
Forecast report	A report of a measure, its forecast, and the variance and percentage variance between them. The layout is fixed. The Time dimension is displayed across the report, and the Measure dimension is displayed down the report.

Component	Description
Page controls	Let you change the contents of both the graph and the report. When you select a different dimension value in a page control, the graph appearance, your view of the data, and the summary statistics change.
Subtitle	Displays the values of the MAPE, MAD, and RMSE summary statistics. The forecast subtitle cannot be edited or removed.
Variance calculations	Shows the cell-by-cell variance and percentage variance between the measure and its forecast., for the current set of dimension values. Variances are not measures, rather, they are calculated on-the-fly when a forecast document is displayed.
Status bar	Displays the method and parameters used to calculate the forecast.
Wizard button	Starts the Forecast Wizard using the settings for the current forecast.

Related information

Search for the following topics in the Analyzer Help system:

"Overview of Forecast Documents"
"Forecast Windows"
"Formatting Forecast Documents"
"Using Forecast Options"

The Director Window

Definition: Director window

The Director window, more commonly referred to as *Director*, provides the most efficient means of accessing a set of related documents. Icons represent documents and folders. To display a document or set of documents you double-click on an icon.

Example: Director window

The Director window is shown in the following figure.
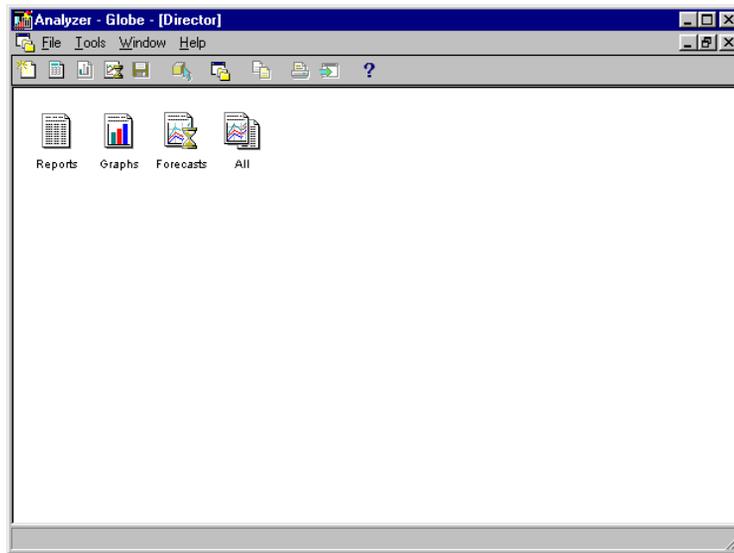
Related information

Search for the following topic in the Analyzer Help system:

"Using Director"

Using the Analyzer Help System

Help contents

The on-line Help system provides step-by-step instructions for performing Analyzer tasks.

The components of the Help system that provide access to specific kinds of information are described in the following table.

Component	Information Accessed
Main contents	How-to and interface-related information
Search utility	Any of the topics that appear in the Help system
Help button in dialog boxes	Specific information about an active dialog box

Accessing Help

To access the Help system, select the Help menu from the Menu bar. Also, each dialog box or page includes a **Help** button. Click this button to view instructions for the task at hand.

4

Creating Reports and Graphs in the Windows Client Environment

Chapter summary

This chapter describes how to create and save Analyzer documents in the Windows client environment.

List of topics

This chapter includes the following topics:

- Creating Documents
- Saving Documents
- Opening Saved Documents
- Specifying Report Types
- Working with Ad Hoc Reports
- Working with Ranking and Exception Reports
- Specifying Graph Types

Creating Documents

Creating a new report, graph, or forecast

To create new Analyzer documents you use the **Open** command from the File menu and the New dialog box.

In the New dialog box, you select Report Graph, or Forecast and then specify a starting option (either **Use Default** or **Copy from Active Window**), if available.

This is the New dialog box with the specifications for creating a new report.
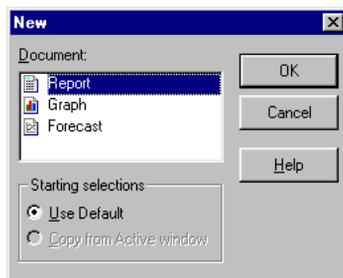
Use Default option

The **Use Default** option creates an Analyzer report or graph based on the layout and dimension selections of a report or graph that has been saved and specified as the default. The default report or graph may be user-specified, pre-defined by a DBA, or supplied by the system.

Copy from Active Window option

The **Copy from Active Window** option creates an Analyzer report or graph based on the data and layout of the document that is currently displayed in the active window.

You can create a graph based on a report and a report based on a graph. In either case, Analyzer replicates the layout of the active document as closely as possible.

Note: You cannot use the Copy from Active Window option to create a new forecast, or when the active document is a forecast.

Related information

Search for the following topics in the Analyzer Help system:

"Creating Graphs"
"Creating Reports"
"Creating Forecasts"
"Specifying Default Graphs"
"Specifying Default Reports"
"Using Starting Selections for Graphs"
"Using Starting Selections for Reports"

Saving Documents

Options for saving a document

When you finish working with an Analyzer document, you might want to save your document.

Analyzer provides two commands on the File menu for saving a document: **Save** and **Save As**.

Using the Save Command

The Save command is available from the File menu or from clicking on the Save button on the Analyzer toolbar. It lets you save your document with its current name and set of options.

Using the Save As Command

The Save As command is available only from the File menu. It lets you name and save a new document or make a copy of an existing document and save it under another name, and to a different drive or directory.

Related information

Search for the following topics in the Analyzer Help system:

"Saving Graphs"
"Saving Reports"
"Saving Forecasts"

Opening Saved Documents

Accessing reports, graphs, and forecasts

You use the Open dialog box to access Analyzer documents. You can open any Analyzer document to which you have read-only or read-write access.

The Open dialog box is shown following.
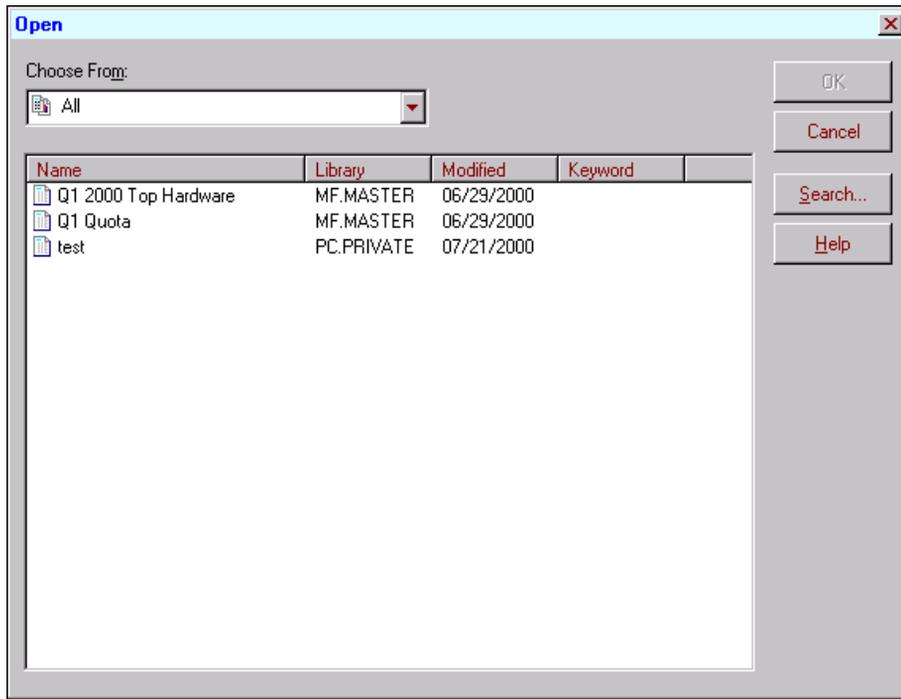
The Choose From box allows you to specify the type of document you want to open. The document type that you choose in this box determines which documents are displayed in the Open dialog box. If you select All, you see all reports and graphs in the current database.

Related information

Search for the following topics in the Analyzer Help system:

"Opening Graphs"
"Opening Reports"
"Opening Forecasts"
"Using the Search Facility"

Specifying Report Types

Types of Analyzer reports

The following table describes the types of Analyzer reports.

Report Type	Description
Ad hoc	Displays data based on the dimension values that you specify in the Selector.
Ranking	Displays data in an order based on a set of criteria that you have specified.
	For example, you can rank the top five products by Base Volume Share, within the geographic area and time period of the current page. Product ranking reports are useful for analyzing the success of product marketing; geographic ranking reports are helpful in monitoring the performance of the sales force.
Exception	Displays data associated with dimension values that are exceptions to cutoff values that you have specified.
	For example, you might display all products whose Unit Sales are greater than $1.5 million, within a specified geographic area and time period.

Report Type	Description
Ranking-then-exception	Displays data in an order that you have specified, then displays a subset of that ranked data based on criteria that you have specified.
	For example, you can rank the top 100 products by Base Volume Share for a year in the U.S., and then display a ranked subset of those products whose Unit Sales exceeded $1.5 million in the U.S. for the year.
Exception-then-ranking	First identifies dimension values that meet a set of criteria that you have specified, and then presents some or all of that data in an order that you have specified.
	For example, you might select all products whose Unit Sales exceed $1.5 million in the U.S. for the second quarter. Then, you can rank the top five of those products by Volume Share Change One Year Ago in the U.S. for the second quarter.

Selecting a report type

You select a report type by choosing one of these commands from the Report menu, which becomes visible when a report is one of your active document windows:

- Choose **Ad hoc** to create an ad hoc report.

- Choose **Ranking/Exception** to access the Ranking and Exception Setup dialog box, which enables you to create ranking, exception, ranking-then-exception, and exception-then-ranking reports.

Working with Ad Hoc Reports

Defining the appearance of an ad hoc report

You can determine the order in which dimension values are presented in an ad hoc report by choosing the **Sort** button in the Selector dialog box and rearranging the order in which the values are displayed in the Sort Selection dialog box. The newly ordered values are displayed in the Selected box in the Selector.

This is how an ad hoc report might look with the Time dimension values sorted earliest to latest.

Measure (3)						Geography (1)
Channel (1)						Product (9)

Analyzer Report
Hardware and Software Sales -- July 95--March 96

Units Sold				Total Japan		
All Channels	Portable PCs	Desktop PCs	Monitors	Modems/Fax	Memory	CD-ROM
July 1995	378	198	173	46	298	74₁
August 1995	253	414	210	418	150	39₆
September 1995	182	355	267	130	206	61₂
October 1995	24	206	95	71	102	43₇
November 1995	145	89	140	0	160	33₀
December 1995	173	107	113	219	84	14₆
January 1996	29	235	0	108	0	38₄
February 1996	111	116	0	0	140	1₄
March 1996	90	13	109	112	202	24₅

Drilling in an ad hoc report

Drilling in Analyzer is a means of navigating among dimension levels. When selecting dimensions or viewing data, you can expand or collapse a dimension hierarchy.

You can drill in these ways:

- Drilling down expands the view to include child values that are associated with parent values in the dimension hierarchy.

- Drilling up collapses the list of descendant values associated with a parent value in the dimension hierarchy.

You drill down in the dimension that appears in the rows position of an ad hoc report.

Conditions necessary for drilling

These conditions must be present to support drilling:

■ Only one dimension can be displayed in the rows position of the report.

■ The dimension in the rows position must be structured hierarchically.

■ The **Drill** command, available from the Report menu, must be toggled on.

Choosing the Drill command

When you choose the **Drill** command, Analyzer displays drill icons next to the row labels of dimension values.

When you click on a drill icon, the report is redisplayed to include values that have been expanded or to exclude values that have been collapsed.

The drill icons are described in the following table.

Icon	Meaning
Plus sign (+)	Appears to the left of a dimension value that can be drilled down (expanded).
Minus sign (-)	Appears to the left of a dimension value that has been fully drilled down and can be drilled up (collapsed).
No drill icon	When you are working with a hierarchy, a dimension value with no drill icon indicates that you are at the lowest level in the hierarchy and there are no children below, or that the value is not a member of the hierarchy with which you are working.

Example: Drilling in ad hoc reports

In this report, the child values that compose the parent value of Western United States are collapsed.

| Measure (3) | | | | | | Time (9) |
| Channel (1) | | | | | | Product (9) |

Analyzer Report

Hardware and Software Sales -- July 95--March 96

Units Sold ▼		July 1995					
All Channels ▼	Portable PCs	Desktop PCs	Monitors	Modems/Fax	Memory	CD-ROM
+ Western United States	418	811	205	369	179	
+ Southern United States	700	662	319	404	335	

In this report, the geography Western United States has been expanded so that you can see its child values.

| Measure (3) | | | | | | Time (9) |
| Channel (1) | | | | | | Product (9) |

Analyzer Report

Hardware and Software Sales -- July 95--March 96

Units Sold ▼		July 1995				
All Channels ▼	Portable PCs	Desktop PCs	Monitors	Modems/Fax	Memory
− Western United States	418	811	205	369	17
Bavarian Indust, GmbH Irvine	0	180	0	74	
Business World San Jose	20	101	101	0	10
Computer USA Tempe	59	115	104	0	
Computer Warehouse San Jose	39	61	0	0	
Computer Whse Services San Jose	115	47	0	36	
Global SAC Sacramento	5	44	0	0	
KLM Enterprises El Segundo	106	159	0	117	6
Piedmont, Inc. San Jose	74	63	0	0	
University of CA San Jose	0	0	0	0	
US Dept. of Naval Research T.	0	41	0	142	1
+ Southern United States	700	662	319	404	33

Related information

Search for the following topics in the Analyzer Help system:

"Drilling in a Dimension Hierarchy in a Report"
"Using Ad Hoc Reports"

Working with Ranking and Exception Reports

Using ranking reports

Product ranking reports are useful for monitoring how well products are selling; geography ranking reports are helpful in analyzing the performance of the sales force.

The type of ranking report that you create depends on the dimension that is located in the row position of the report; only one dimension can be ranked per report. For example, if you were to rank products, values of the Product dimension would have to run down the report; the values of the remaining dimensions could be on the same page or on separate pages of the report.

The following ranking report displays products sorted according to their dollar sales in the Asia Pacific region for the year 1995.

Using exception reports

An exception report displays data associated with dimension values that meet a set of criteria that you specify.

This Ranking and Exception Setup dialog box generates an exception report based on dollar sales, where all the products that appear must have produced less than $50,000 in sales for the first quarter of 1997.

Using ranking-then-exception reports

Ranking-then-exception reports rank the values of the dimension in the rows position first, and then, based on that information, display only the dimension values that meet a specified set of criteria.

The selection criteria specified in the Ranking and Exception Setup dialog box shown following require Analyzer to sort products whose unit sales were among

the top 5 for the first quarter of 1997, and then identify those products whose dollar sales figures were less than $1,000,000 during the same quarter.
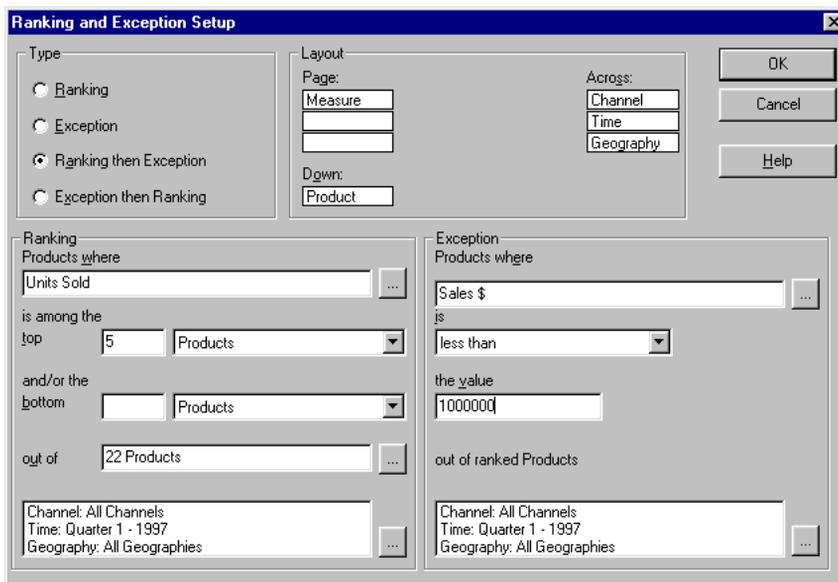
Using exception-then-ranking reports

Exception-then-ranking reports first identify dimension values that meet a specified set of criteria and then rank the resulting values.

The selection criteria specified in the Ranking and Exception Setup dialog box shown following requires Analyzer to extract those products whose dollar sales

exceeded $2,000,000 and rank the five top-selling products by units sold for all geographies and channels.

Related information

Search for this topic in the Analyzer Help system:

"Using Ranking/Exception Reports"

Specifying Graph Types

Types of Analyzer graphs

The types of Analyzer graphs are described in the following table.

Graph Type	Description
Area	The area graph shows trends and emphasizes the amount of change in data. There are two types of area graphs: absolute area and percentage area.
Bar-line	The bar-line graph shows the relationship between data. There are four bar-line graph subtypes: clustered bar-line, stacked bar-line, dual Y-axis bar-line, and clustered dual Y-axis bar-line.
Horizontal bar	The horizontal bar graph compares data over dimensions. There are four horizontal graph subtypes: clustered horizontal bar, stacked horizontal bar, clustered dual Y-axis horizontal bar, and percentage horizontal bar.
Line	The line graph shows trends over a period of time and emphasizes the rate of data change. There are two line graph subtypes: multiple line and multiple dual Y-axis line.
Pie	The pie graph shows the distribution of parts to the whole. There are five pie graph subtypes: multiple pie, proportional multiple pie, exploded pie, multiple exploded pie, and proportional multiple exploded pie.
Scatter	The scatter graph shows relationships between two measures. There is one scatter graph subtype: fit line scatter.
Vertical bar	The vertical bar graph, like the horizontal bar graph, compares data over dimensions. There are four vertical graph subtypes: clustered vertical bar, stacked vertical bar, clustered dual Y-axis vertical bar, and percentage vertical bar.

Selecting a graph type

You change the graph type by using the Graph Type dialog box, which you access by choosing the **Type** command from the Graph menu.

The appearance of the graph is determined by the positioning of the axes, legend, and page tiles in the graph window.

Using area graphs

The layout of an area graph is determined in this way:

- There is one area for each dimension value represented in the legend tile; corresponding data values are displayed along the Y-axis.

- Each dimension value represented in the axis tile is a point on the X-axis.

The following figure shows an example of an area graph.
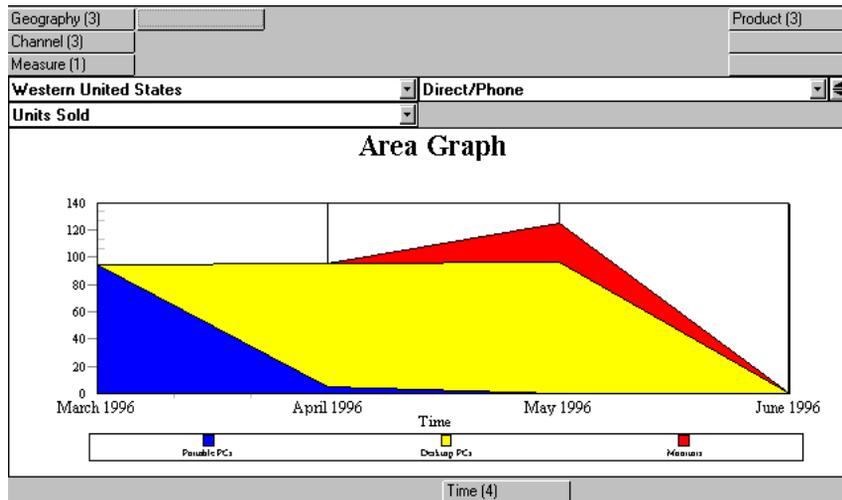
Using bar-line graphs

Bar-line graphs are useful for displaying the relationship between data that is measured in different units. For example, you can show the relationship between changes in Average Price Per Unit and Incremental Volume Share.

The layout of a basic bar-line graph is determined in this way:

- The first dimension value in the legend tile is displayed as a line.

- The second dimension value in the legend tile is displayed as bars.

- Data values that correspond to the legend dimension values are presented along the Y-axis. (The two dimension values that are displayed are the first two that appear in the Selected box of the Selector.)

■ Each value of the dimension represented in the axis tile is displayed on the X-axis.

In the clustered and stacked bar-line graph subtypes, the first value of a dimension represented in each legend tile is displayed as a line; the remaining dimension values are displayed as bars.

This is a sample bar-line graph.
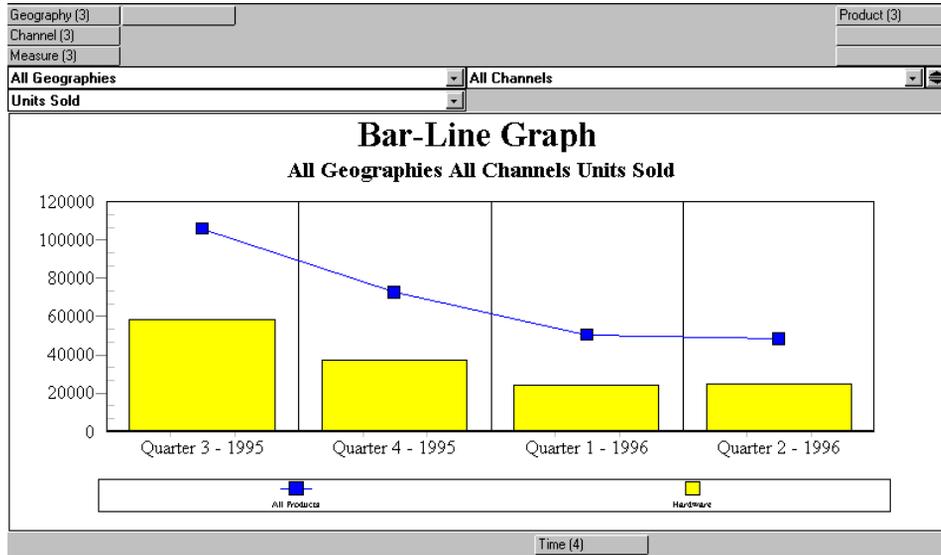
Using horizontal bar graphs

A horizontal bar graph compares data over dimensions. The number of bars in a basic horizontal graph is based on the number of values of the dimension represented in the axis tile. In the figure that follows, this is the tile for the Time dimension.

This is a sample horizontal bar graph.
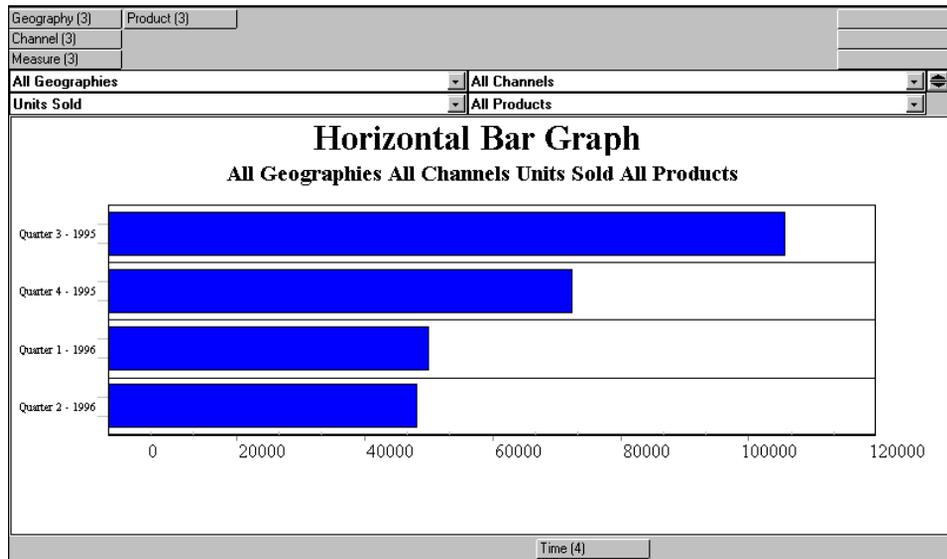
Using line graphs

A line graph shows trends over a period of time and emphasizes the rate of data change.

The layout of a basic line graph is determined in this way:

- Data for the selected value of each dimension that is represented in a page tile is displayed as a line.

- Each value of the dimension represented in the axis tile is represented by a data point along the X-axis.

- In multiple line graphs, there is one line for each value of a dimension that appears in the legend tile.

This is a sample line graph.
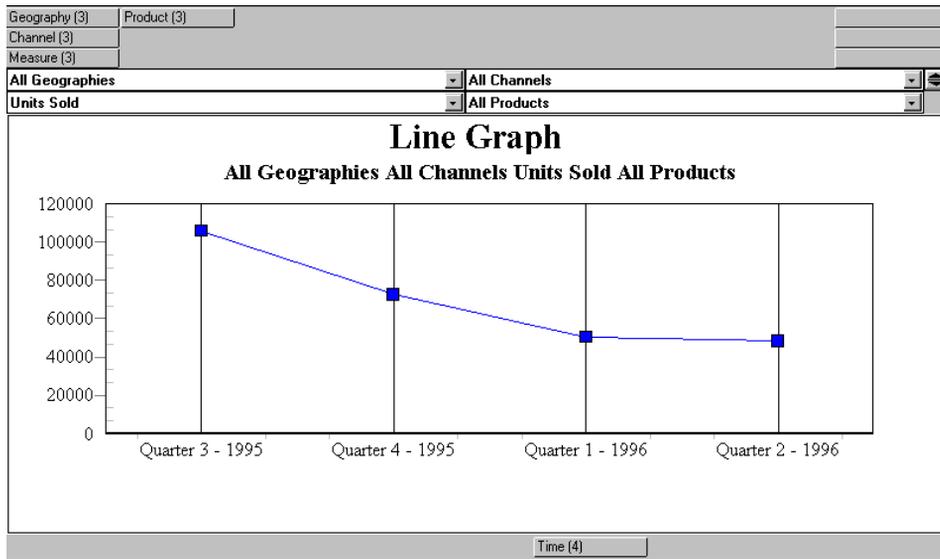
Using pie graphs

A pie graph shows the distribution of parts to the whole.

The layout of a basic pie graph is determined in this way:

- The number of slices reflects the number of values for the dimension that is represented in the legend tile.

- No dimension is represented in the axis tile (for single pie graphs).

- For multiple pie graphs, the number of values represented in the axis tile determines the number of pies.

Following is a sample pie graph.
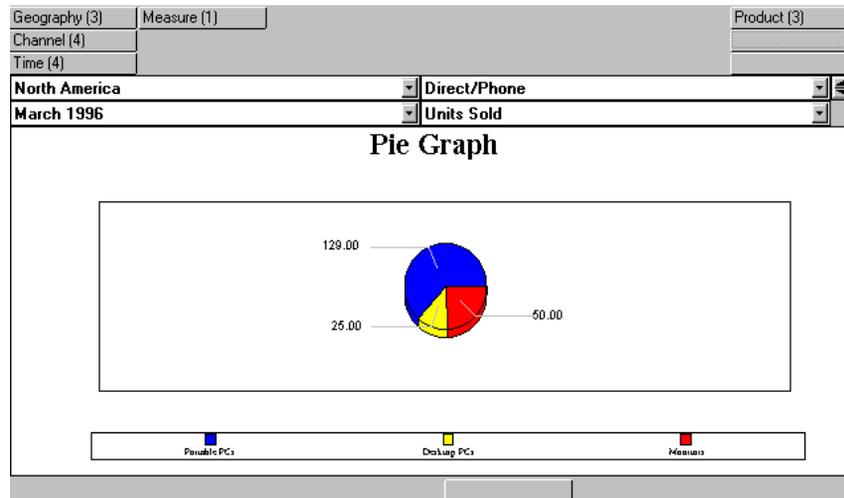
Using scatter graphs

A scatter graph shows relationships between two variables.

These are some characteristics of scatter graphs:

- A scatter graph can display two measures.

- By default, the two measures displayed in the scatter graph are the first two that appear in the Selected box of the Selector.

- Measures are always represented in the innermost axis tile.

The layout of a basic scatter graph is determined in this way:

- The number of different colors of data markers represents the number of dimension values in the legend tile.

- The number of data markers of each color is determined by the number of dimension values in the outermost axis tile.

- The measure that runs along the X-axis is the first measure that is displayed in the Selector; the measure that runs along the Y-axis is the second measure.

Following is a sample scatter graph.
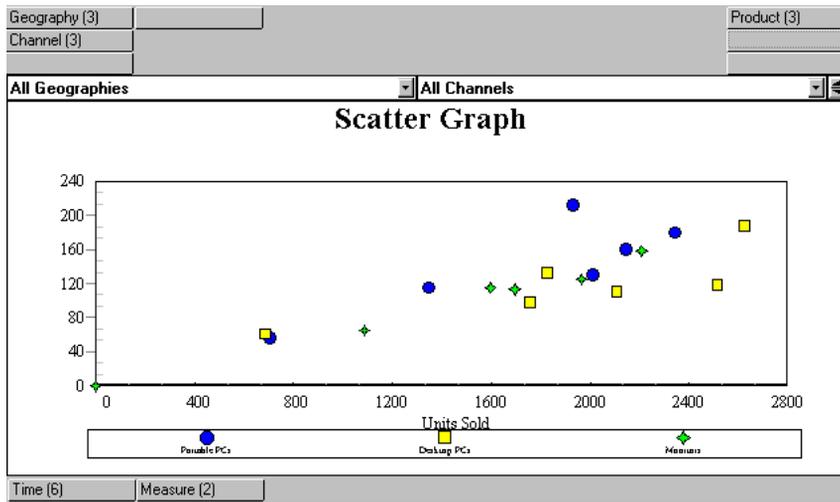
Using vertical bar graphs

The vertical bar graph, like the horizontal bar graph, compares data over dimensions.

The number of bars in a basic vertical graph is determined by the number of values of the dimension represented in the axis tile.

Following is a sample vertical bar graph.
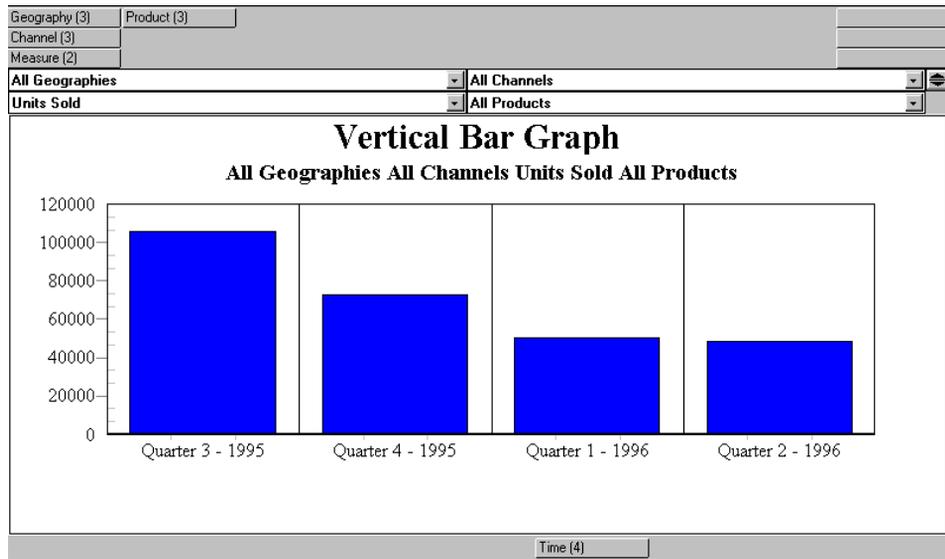
Related information

Search for the following topics in the Analyzer Help system:

"Components Specific to Graph Subtypes"
"Selecting Graph Types and Subtypes"
"Using Area Graphs"
"Using Bar-Line Graphs"
"Using Horizontal Bar Graphs"
"Using Line Graphs"
"Using Pie Graphs"
"Using Scatter Graphs"
"Using Vertical Bar Graphs"

5

Customizing Documents in the Windows Client Environment

Chapter summary

This chapter provides an overview of customizing Analyzer documents by changing your view of the data, editing titles and labels, and formatting the components of your documents. The information in the chapter applies to the Windows Client environment.

List of topics

This chapter includes the following topics:

- Changing Your View of the Data
- Editing Titles and Labels
- Formatting Reports
- Formatting Graphs
- Formatting Forecasts

Changing Your View of the Data

The significance of a report or graph layout

You change the layout of a report or graph by changing the relative positions of dimensions. Changing a report or graph layout gives you a different perspective on your data.

Note: You cannot change the layout of a forecast document.

Changing a report or graph layout

You rearrange dimensions by moving or swapping dimension tiles in the active report or graph window.

You use the drag-and-drop method to swap dimension tiles.

This report displays products in the rows (down) position, measures in the columns (across) position, and geographies, time periods, and channels in the page controls.

Geography (3)				Measure (4)
Time (1)				
Channel (3)				

Analyzer Report

	Units Sold	Sales $	Customer Discount	Sales Less Discount
North America ▾				
Quarter 2 - 1996 ▾				
All Channels ▾				
Sentinel Standard	1,051	2,312,200	76,890	2,235,310
Sentinel Financial	492	1,180,800	15,720	1,165,080
Sentinel Multimedia	984	2,558,400	64,870	2,493,530

Product (3)			

To focus on how products performed across all the markets in which they were sold, you can rearrange the report layout.

In the following report, the layout has been rearranged so that geographies are displayed in the rows position, products run across the page, and measures, time periods, and channels appear in the page controls of the report.

Related information

Search for the following topics in the Analyzer Help system:

"Arranging Layouts in Graphs"
"Arranging Layouts in Reports"

Editing Titles and Labels

Which document components you can change?

You can modify these text components in Analyzer reports:

- Title
- Subtitle
- Row labels
- Column labels
- Footnotes

You can modify these text components in Analyzer graphs and forecast documents:

- Title
- Subtitle (graph only)
- Axis titles
- Legends
- Footnotes

Using the edit bar

The edit bar is a component of the Analyzer window. It is an Analyzer option that can be displayed or hidden.

You use the edit bar to modify document text components. When you click on a document component to select it, Analyzer displays its contents in the edit bar.

The edit bar includes a Cancel button with an X and an Enter button with a check mark. You can clear text from the edit bar by clicking on the Cancel button, or apply new text to a component by typing it and then clicking on the Enter button.

The edit bar is shown in the following figure.

Related information

Formatting Reports

Where are the formatting options for reports?

When your active window is an Analyzer report, the Format menu, available from the Analyzer Main menu, lists the formatting options that you can use for reports. When you choose a formatting command, you access a dialog box containing the tools that you need for that type of formatting.

Which report components can you format?

The following table describes the formatting options you can use in Analyzer reports and the report components to which each option can be applied. Each option is a Format menu command that you can select.

Formatting Option	Description	Components to Which Option Applies
Alignment	Lets you change the horizontal and vertical positioning of the selected component	Title, subtitle, page control labels, row labels, column labels, data values, footnote
Font	Lets you specify the font, font style, size, and color of the selected component	Title, subtitle, page control labels, row labels, column labels, data values, footnote
Patterns	Lets you specify the color of the selected component (you may only assign solid patterns to report components)	Title, subtitle, page control labels, row labels, column labels, data values, footnote; you can also assign colors to a report's background
Border	Lets you specify the style, width, and color of the border of the selected component, as well as the sides on which the component will have borders	Title, subtitle, page control labels, row labels, column labels, data values, footnote
Format Number	Lets you specify how numbers will appear in a report (e.g., the number of digits to be used when displaying data values containing decimals)	Data values
Column Width	Lets you change the column width of data cells	Data cells
Row Height	Lets you change the row height of data cells	Data cells

Formatting all occurrences of a label

The most efficient way to change the formatting of all occurrences of one label is to select the label by clicking on it and then apply the desired formatting option(s).

Formatting all labels for a dimension

You can format all the labels associated with a particular dimension by clicking on a label (e.g., 1997), using the **Highlight Special** command to access the Highlight

Special dialog box, and then applying formatting attributes by choosing options buttons or selecting checkboxes in the dialog box.

The dialog box that follows is the Highlight Special dialog box. The specifications that were entered ensure that all labels associated with the Time dimension are highlighted.
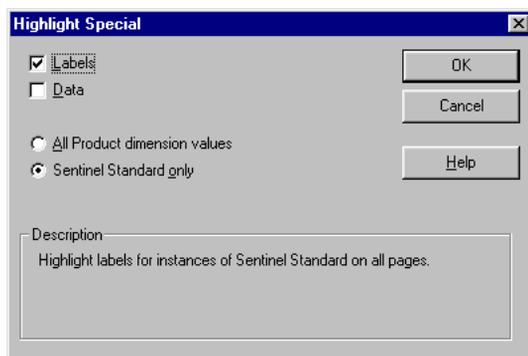
Formatting all data for a particular dimension

You can format all data values associated with a particular dimension (e.g., Time).

You can format all data values associated with a particular dimension by using the Highlight Special dialog box as described in "Formatting all labels for a dimension" on page 5-5.

Formatting all data for a particular dimension value

You can format all data values associated with a particular dimension value e.g., (February, 2000).

The most efficient way to change the formatting of all data values associated with a particular dimension value is to select the label by clicking on it and then apply the formatting by choosing an option from the Format menu.

Formatting data values is more complicated than formatting labels; these are some issues for you to keep in mind.

Issue	Description
Formatting order	▪ Each measure has number formatting information associated with it that is automatically read out of the database; this may result in conflicts when you apply number formatting. ▪ Analyzer has a default formatting order to resolve formatting conflicts. You can change the order of precedence in which formatting characteristics are applied by using the Settings box of the Report Options dialog box.
Layout changes	When you format a report, the formatting attributes apply to the dimension's labels and data values. Therefore, if you change the layout of a report, the formatting characteristics remain with the dimension.

Related information

Search for the following topics in the Analyzer Help system:

"Choosing Colors for Text and Numbers in Reports"
"Formatting Numbers in Reports"
"Report Formatting"
"Using Patterns and Colors in Reports"

Formatting Graphs

Where are the formatting options for graphs?

When your active window is an Analyzer graph, the Format menu, available from the Analyzer Main menu, lists the formatting options that you can use for graphs. When you choose a formatting command, you access a dialog box containing the tools that you need for that type of formatting.

Which graph components can you format?

These are the formatting options you can use in Analyzer graphs and the graph components to which each option can be applied. Each option is a Format menu command that you can select.

Formatting Option	Description	Components to Which Option Applies
Alignment	Lets you change the horizontal positioning of the selected component.	Graph title, subtitle, labels, footnote, legend text
Axis Options	Lets you change the style of tick marks and the font, number, and arrangement of tick labels.	Tick marks and tick labels on graph axes
Font	Lets you specify the font, font style, size, and color of the selected component.	Graph title, subtitle, labels, including those labels associated with tick marks, footnote, legend text
Format Number	Lets you specify how numbers will appear along an axis (e.g., the number of digits to be used when displaying data values containing decimals).	Axes
Patterns	Lets you specify the pattern, color, or pattern and color of the selected component.	Data markers; borders for graphs and legends
Series Options	Lets you modify the manner in which data series are represented in your graph. You can display a series as a bar or line.	Data markers

Related information

Search for the following topics in the Analyzer Help system:

"Assigning Axis Options in Graphs"
"Assigning Patterns in Graphs"
"Choosing Colors and Patterns for Data Markers in Graphs"
"Choosing Colors for Text and Numbers in Graphs"

Formatting Forecasts

Where are the formatting options for forecasts?

When your active window is an Analyzer forecast, the Format menu, available from the Analyzer Main menu, lists the formatting options that you can use for a forecast.

The formatting options available depend on whether you have selected the graph or the report in the forecast document.

When you choose a formatting command, you access a dialog box containing the tools that you need for that type of formatting.

Which forecast components can you format?

Since a forecast includes both a report and a graph, you format each component separately, using the report and graph formatting options.

These are the formatting options you can use for Analyzer forecasts and the forecast components to which each option can be applied. Each option is a Format menu command that you can select.

Formatting Option	Description	Components to Which Option Applies
Alignment	Lets you change the horizontal positioning of the selected component.	Title, subtitle, labels, footnote, legend text
Axis Options	Lets you change the style of tick marks and the font, number, and arrangement of tick labels.	Tick marks and tick labels on graph axes
Font	Lets you specify the font, font style, size, and color of the selected component.	Title, subtitle, labels, footnote, legend text
Format Number	Lets you specify how numbers will appear along an axis (e.g., the number of digits to be used when displaying data values containing decimals).	Graph axes, report data cells
Patterns	Lets you specify the pattern, color, or pattern and color of the selected component.	Graph data markers, borders, and legends Report data cells and labels

Formatting Option	Description	Components to Which Option Applies
Border	Lets you specify the style, width, and color of the border of the selected component, as well as the sides on which the component will have borders	Report row labels, column labels, data cells values, footnote
Column Width	Lets you change the column width of data cells	Report data cells
Row Height	Lets you change the row height of data cells	Report data cells

Related information

Search for the following topic in the Analyzer Help system:

"Formatting Forecast Documents"

6

Using the Selector in the Windows Client Environment

Chapter summary

This chapter describes how you use the Selector dialog box, also known as the Selector, to select the dimension values that appear in your reports and graphs. The information in the chapter applies to the Windows client environment.

List of topics

This chapter includes the following topics:

- Introduction to the Selector
- Selecting Dimension Values
- Using the All Tool
- Using the Attribute Tool
- Using the Exception Tool
- Using the Family Tool
- Using the Level Tool
- Using the Match Tool
- Using the Range Tool
- Using the Top/Bottom Tool

Introduction to the Selector

What is the Selector?

The Selector is the short name for the Selector dialog box, which enables you to select and sort dimension values and retrieve saved selections. Your use of the Selector determines the content of your Analyzer reports and graphs. You can use the Selector to select dimension values manually, or you can use a set of built-in selection tools.

This is a sample Selector dialog box.
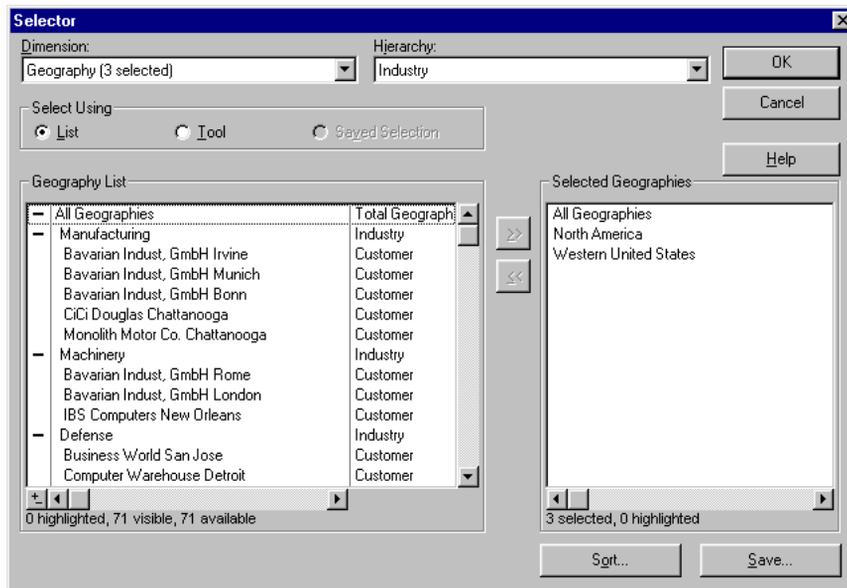
Components of the Selector

The components of the Selector are described in the following table.

Component	Description
Dimension box	Displays the name of the dimension with which you are working, as well as the number of values selected for the current dimension. You can also select measures though this box.
Hierarchy box	Displays the hierarchy in which you are working, if there is one. In some cases, a database may be organized so that a dimension has more than one hierarchy associated with it.
Select Using box	Displays selection methods available for selecting values for the current dimension. When you choose **List**, the *Available* box displays a list of all values for the current dimension. When you choose **Tool**, the *Available* box displays icons for the Analyzer selection tools that are available for the dimension you selected in the Dimension box. The complete set of Analyzer selection tools includes the All, Level, Family, Attribute, Match, Exception, Range, and Top/Bottom tools. When you choose **Saved Selection**, the *Available* box displays the names of your saved selections for the current dimension.
Available box	Displays a list of values, tool icons, or the names of saved selections for the current dimension. If the current dimension is structured hierarchically and you choose **List**, the *Available* box may also feature drill icons, which allow you to access values at different levels of the dimension hierarchy and the names of levels at which each dimension value resides. You indicate whether to allow drilling or to display the levels for each dimension using controls in the Options dialog box.
Selected box	Displays all the values that are selected for the current dimension.
Add button	 $\boxed{\gg}$ Lets you add highlighted values in the *Available* box to the Selected box.
Remove button	 $\boxed{\ll}$ Lets you remove highlighted values from the Selected box.

Component	Description
Sort button	Displays the Sort Selection dialog box, which enables you to sort the values in the Selected box. The available sort methods change according to the dimension. Dimension values are displayed in reports and graphs in the order in which you sort them.
Save button	Displays the Save a Selection dialog box, which enables you to save the current dimension selection so that you can retrieve and use it later.

Related information

For information on hierarchies and levels, see "Analyzer Concepts" on page 1-2.

Selecting Dimension Values

When do you select values manually?

You select individual values manually in these situations:

■   When the dimension contains few values.

■   When the dimension lacks a structure that you can take advantage of with the Selector's tools. You would not, for example, use the Family or Level tools on a dimension that was not hierarchical.

When do you select values with Selector tools?

You select dimension values with Selector tools in these situations:

■   When the dimension contains many values.

■   When the dimension has a structure that you can take advantage of with the Selector's tools. The Family tools, for example, works best with a dimension whose values are structured so that there are "parent" values, "children" values below them, and "descendant" values below the children.

This is the Selector dialog box with the Tools box displayed. The Range tool is not shown because it is only used with the Time dimension.
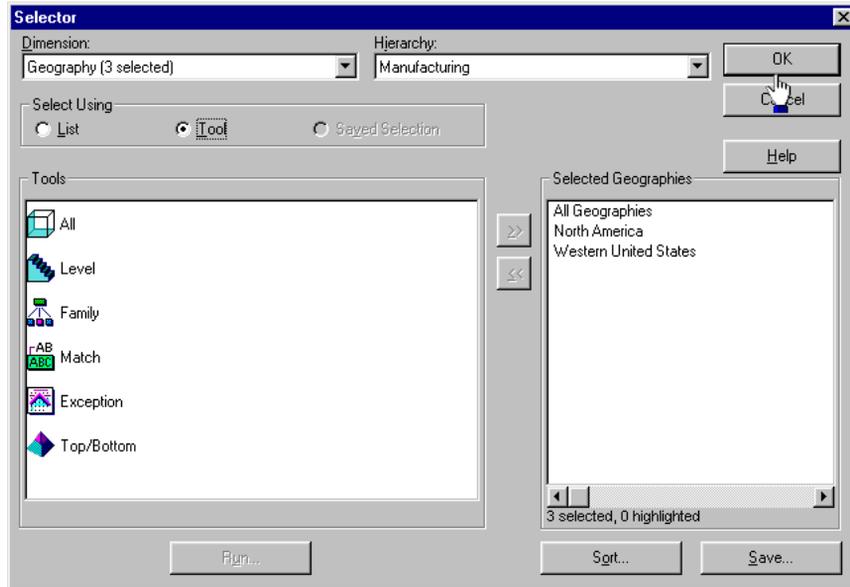
Which Selector tools can you use?

Analyzer offers the following Selector tools to help you select dimension values and measures:

- All tool
- Attribute tool
- Exception tool
- Family tool
- Level tool
- Match tool
- Range tool
- Top/Bottom tool

How to access Selector tools

You use the Selector tools from a group of specialized dialog boxes that you access by double-clicking on a Selector tool icon, or selecting a tool icon and then choosing **Run**.

These are the dialog boxes from which you access Selector tools:

- Select All dialog box
- Select by Level dialog box
- Select by Family dialog box
- Select by Attribute dialog box
- Select by Matching Characters dialog box
- Select by Exception dialog box
- Select by Top/Bottom dialog box
- Select by Range dialog box

Features of the Selector tools

The Selector tools all share the features described in the following table.

Feature	Description
Provide selection options	Four options that allow you to filter your selections as you go along: ■ **Select** lets you specify a new dimension selection that consists of any of the values in the dimension. ■ **Add** lets you add values to the current selection. ■ **Keep** lets you retain a subset of values of the current dimension selection. ■ **Remove** lets you remove a subset of values from the current dimension selection.
Display a script	A text description in the Script box describes the method used to specify a dimension selection.
Display a **Preview** button	Accesses another dialog box that enables you to preview a dimension selection before applying it to ensure that the resulting values will meet the specifications you want.

Using the All Tool

What is the All tool?

The All tool, from which you can access the Select All dialog box, is available for all dimensions. You can use the Select All dialog box to specify all the values in a dimension for a particular hierarchy or a dimension.

Example: Select All dialog box

This is the Select All dialog box.
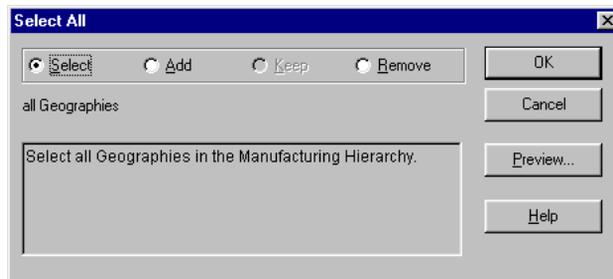
Using the Attribute Tool

What is the Attribute tool?

The Attribute tool, from which you can access the Select by Attribute dialog box, is available for any dimension with stored attribute data. You can use the Select by Attribute dialog box to specify dimension values by *attribute* within levels of the dimension hierarchy. You specify three types of selection criteria: attributes, attribute values, and levels.

Definition: Attribute

An attribute is a descriptive characteristic shared by dimension values. Attributes represent logical groupings that allow users to select data based on like characteristics. For example, in a database representing footwear, you can use a shoe color attribute to select all boots, sneakers, and slippers that share the same color.

Example: Select by Attribute dialog box

This is the Select by Attribute dialog box.
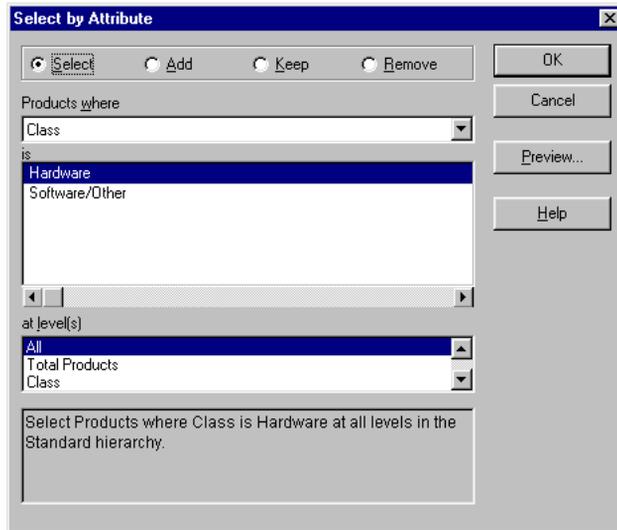
Using the Exception Tool

What is the Exception tool?

The Exception tool, from which you can access the Select by Exception dialog box, is available for all dimensions except Measure.

You use the Select by Exception dialog box to specify dimension values based on cutoff data values.

Example: Select by Exception dialog box

The Select by Exception dialog box is shown following with selection criteria that produce a dimension selection that contains products that sold more than 5,000 units in all geographies and channels in 1998.
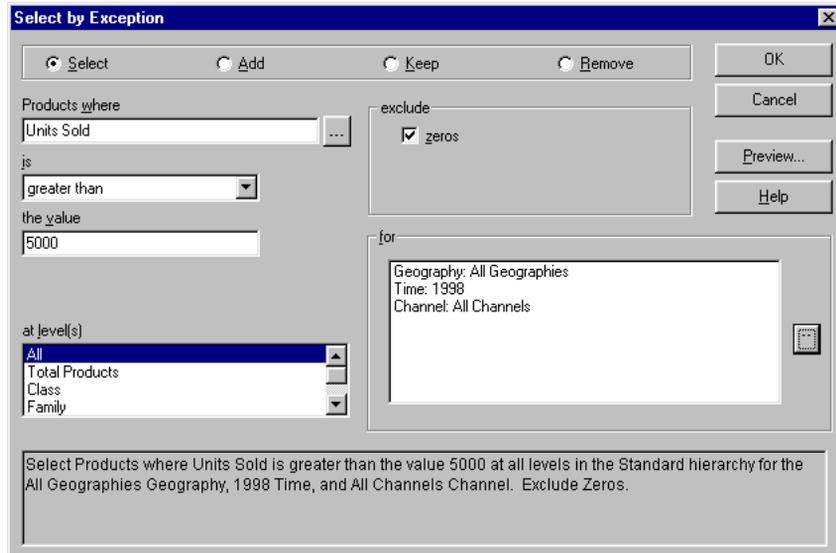
Using the Family Tool

What is the Family tool?

The Family tool, from which you can access the Select by Family dialog box, is available for any dimension that is structured hierarchically. You can use the Select by Family dialog box to specify a *family* of dimension values for a particular hierarchy.

Definition: Family

A family is a group of related dimension values that correspond to the levels of the dimension hierarchy. Dimension values within a family can relate to each other as ancestor, parent, child, and descendant.

Example: Select by Family dialog box

The Select by Family dialog box is shown following. The selection criteria that are specified produce a dimension selection that contains all the family members at the class level in the standard hierarchy of the Product dimension.
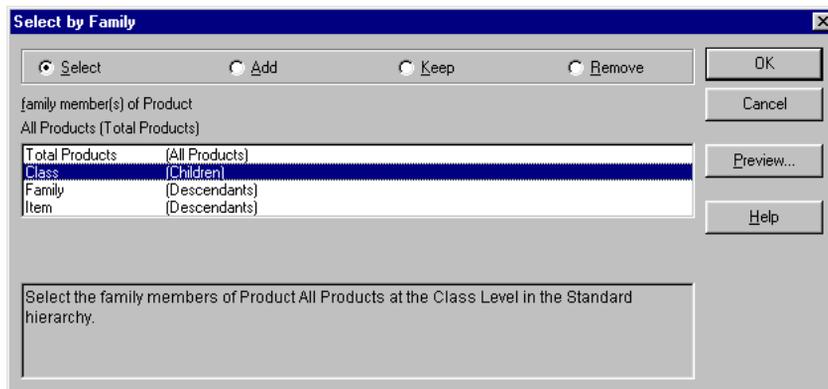
Using the Level Tool

What is the Level tool?

The Level tool, from which you can access from the Select by Level dialog box, is available for any dimension that is structured hierarchically. to specify dimension values based on their levels in a particular hierarchy.

Definition: Level

A level is a position in a dimension hierarchy. Each level above the base level represents the aggregated total of the data from the level below. For example, the Time dimension might have ascending levels such as Month, Quarter, and Year. Within a dimension hierarchy, the dimension values at one level have family relationships with corresponding dimension values at the levels above and below that level.

Example: Select by Level dialog box

The Select by Level dialog box is shown following. The selection criteria that are specified produce a dimension selection that contains all the values at the item level in the standard hierarchy of the Product dimension.
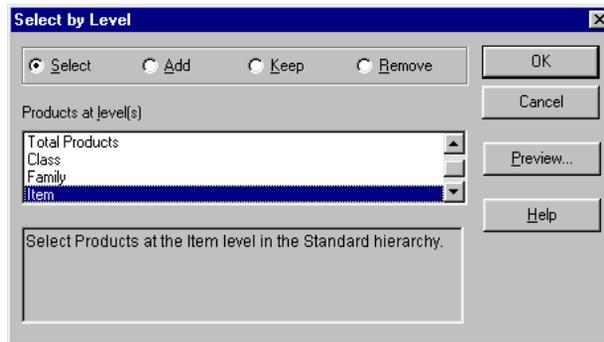
Using the Match Tool

What is the Match tool?

The Match tool, from which you can access the Select by Matching Characters dialog box, is available for all dimensions. You can use the Select by Matching Characters dialog box to specify dimension values by matching a string of characters.

Example: Select by Matching Characters dialog box

The Select by Matching Characters dialog box is shown following. The selection criteria that are specified produce a dimension selection that contains all the measures that contain the characters "units."
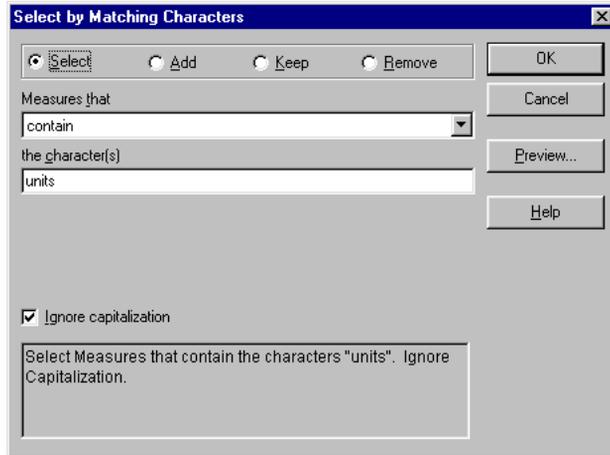
Using the Range Tool

What is the Range tool?

The Range tool, from which you can access the Select by Range dialog box, is only available for the Time dimension.

Definition: Range

You can use the Select by Range dialog box to specify time periods based on the following criteria:

- A specific number of the most recent time periods
- A beginning time period through the most recent period
- A beginning and an ending time period

Example: Select by Range dialog box

The Select by Range dialog box is shown following. The selection criteria that are specified produce a dimension selection that contains a range of months that runs from January 1998 to June 1998.
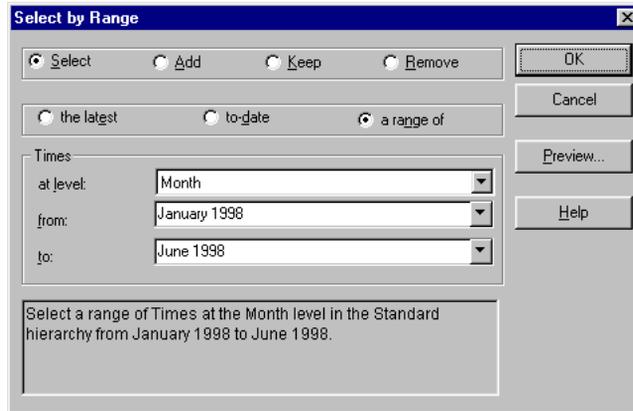
Using the Top/Bottom Tool

What is the Top/Bottom tool?

The Top/Bottom tool, from which you can access the Select Top/Bottom dialog box, is available for all dimensions except Measure. You can use the Select Top/Bottom dialog box to specify dimension values based on the top *x*, bottom *y*, or top *x* and bottom *y* data values.

Example: Select Top/Bottom dialog box

The Select Top/Bottom dialog box is shown following. The selection criteria that are specified produce a dimension selection that contains ten products whose unit sales were the highest for All Geographies and All Channels for the 2nd Quarter of 1998.
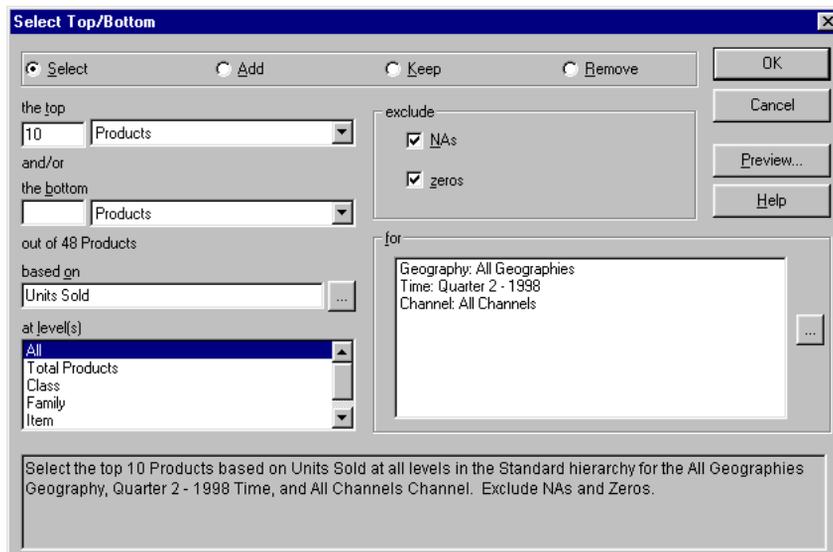
Related information

Search for the following topics in the Analyzer Help system:

"Selecting All Dimension Values"
"Selecting Dimension Values by Attribute"
"Selecting Dimension Values by Exception"
"Selecting Dimension Values by Family"
"Selecting Dimension Values by Level"
"Selecting Dimension Values by Matching Characters"
"Selecting Dimension Values by Range"
"Selecting Dimension Values by Top/Bottom Values"

7

Manipulating Data in Windows Client Documents

Chapter summary

This chapter describes how you can manipulate data in documents by working with saved selections, custom aggregates, and custom measures. The information in the chapter applies to the Windows client environment.

List of topics

This chapter includes the following topics:

- Creating Saved Selections
- Retrieving Saved Selections
- Sorting Saved Selections
- Using Custom Aggregates
- Using Custom Measures

Creating Saved Selections

What are saved selections?

Saved selections are subsets of a dimension's values that you have selected, named, and saved by using the Selector dialog box.

How do you save a selection?

You save a dimension selection by using the Selector to select dimension values manually, with a Selector tool, or even with another saved selection. Then you choose the **Save** button in the Selector, enter a name in the Save a Selection dialog box, and decide whether to save the selection as a script or a list.

This is the Save a Selection dialog box.
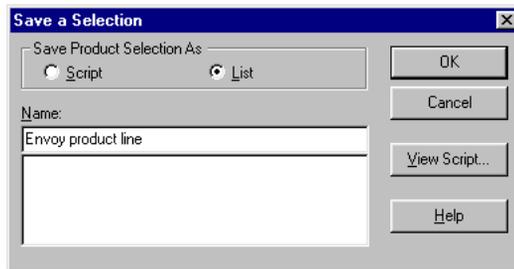
How are saved selections used?

Saved selections save time and effort by allowing you to retrieve a group of values, and the steps you took to select them, without the work that goes into defining and refining a dimension selection.

What are lists and scripts?

When you save a selection, you have two options — you can save the selection as a list or as a script. Your decision depends on these two factors:

- The frequency with which you apply the selection and the probability that the values that compose the selection will change over time

- The method (manual or tool) that you use to make the selection

When you save a list, you save the specific dimension values that meet a set of selection criteria in the Selector. You preserve the actual list of dimension values for a future selection. A list contains actual dimension values (for example, Global SAC Sacramento, KLM Enterprises El Segundo).

When you save a script, you save a textual description of the criteria used for selecting a subset of values from a dimension in the Selector. You preserve the formula or steps for a future selection rather than the specific dimension values.

Do I save a selection as a list or script?

When you should save a selection as a list

You should save dimension selections as a list in the following instances:

- When you want to look at the same dimension values on an ongoing basis (for example, you are a regional sales manager who plans on reviewing the performance of the same markets regularly).

- When you used the drag-and-drop method to sort the values that compose your selection. (You can only save a selection as a list in this case.)

When you should save a selection as a script

You should save a dimension selection as a script in the following instances:

- When your database is subject to change. A good script enables you to reapply the logic of the saved selection instead of reselecting specific values.

- When you click on either **Select** or **Add** to begin the selection process and do not use the drag-and-drop method in the Sort Selection dialog box.

- When you anticipate having to apply the same *criteria* repeatedly over a long period of time, but expect the values that compose the selection to change (e.g., you conduct quarterly product reviews and want to make sure that you always have immediate access to the latest three months of data).

Related information

Search for the following topics in the Analyzer Help system:

"Recording Scripts"
"Saving Dimension Selections"

Retrieving Saved Selections

Choosing the Saved Selection option

When you choose the **Saved Selections** option button, the Selector dialog box changes, displaying command buttons that are not available when you select dimension values manually or with tools.

The Selector, with these additional components visible, is shown following.
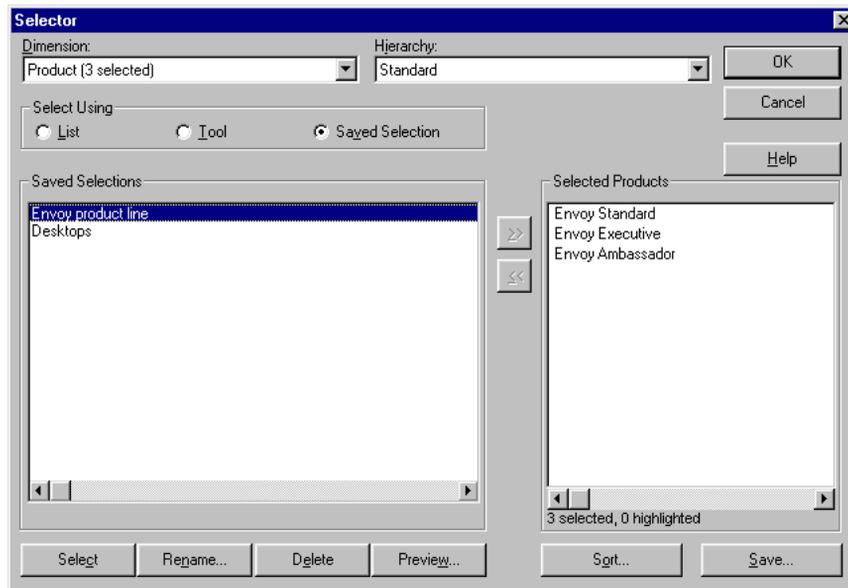
Components used with saved selections

The Selector buttons associated with saved selections are described in the following table.

Command Button	Description
Select button	Available when you select Saved Selection in the Select Using box. Retrieves the saved selection into the Selected box.
Rename button	Available when you select Saved Selection in the Select Using box. Displays the Rename a Selection dialog box, which enables you to rename a saved selection.

Command Button	Description
Delete button	Available when you select Saved Selection in the Select Using box. Enables you to delete the saved selection you selected.
Preview button	Available when you select Saved Selection in the Select Using box. Enabled when you select the name of a saved selection in the Available box. Displays the Preview dialog box, which enables you to see the script of the saved selection and the names of the values that have been saved.
Sort button	Displays the Sort Selection dialog box, which enables you to sort the values in the Selected box. The available sort methods change according to the dimension. Dimension values are displayed in documents in the order in which you sort them.
Save button	Displays the Save a Selection dialog box, which enables you to save a selection so that you can retrieve and use it later.

How you retrieve a saved selection

You retrieve a saved dimension selection by clicking on the **Saved Selection** option in Selector and double-clicking on the name of the saved selection.

You can also click on the name of the selection and then choose the **Select** button.

Sorting Saved Selections

Changing the look of your document

Sorting the dimension values in a saved selection can change the look of your document.

You choose the Sort button in the Selector dialog box to access the Sort Selection dialog box, which is shown following, specifying an alphabetic sort order for the values of the Product dimension.
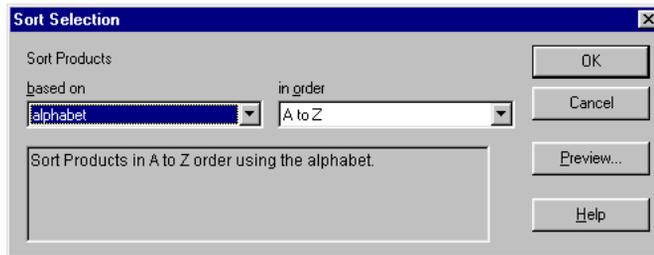
Sorting dimension selections in reports

The following ad hoc report shows product values sorted alphabetically.

Sorting dimension selections in graphs

In the following graph, the saved selection for the Time dimension was sorted by time, using the "latest-to-earliest" method.
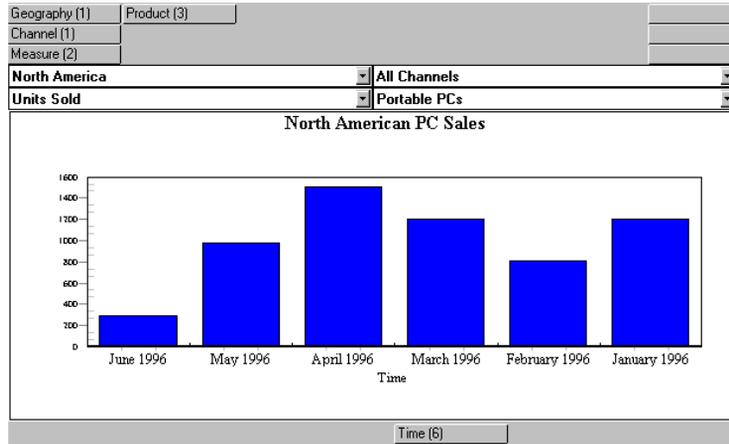
Sort methods you can use on saved selections

The following table shows the sort methods that are available to you in the Sort Selection dialog box.

Sort Method	Description
Alphabet	Sorts dimension values alphabetically, either from A to Z or from Z to A. Use this method for any dimension except Time.
Database	Sorts dimension values either in the same order or in the reverse order of the order in which they were entered into the database. Use this method for any dimension.
Data value	Sorts dimension values based on their numerical values. You can sort from high to low or from low to high. Use this method for any dimension except Measure.
Drag and drop	Allows you to reorder dimension values manually, using the drag-and-drop method. Use this method for any dimension.
Hierarchy	Sorts dimension values based on their order in the Standard hierarchy. You can sort from top to bottom or from bottom to top. This method is only available if the dimension with which you are currently working is structured hierarchically. Not available for measures.

Sort Method	Description
Level	Sorts dimension values based on their levels in the hierarchy. You can sort from top to bottom or from bottom to top. This method is only available if the dimension with which you are currently working is structured hierarchically. Not available for measures.
Time	Sorts dimension values based on the earliest to the latest time period or the latest to the earliest time period. Use this method for the Time dimension.

Related information

Search for these topics in the Analyzer Help system:

"Retrieving Saved Dimension Selections"
"Sorting Dimension Selections"

Using Custom Aggregates

What is a custom aggregate?

A custom aggregate is a single dimension value that is created by combining multiple values from one dimension. For example, a custom aggregate could be three key accounts rolled up into a single value in the Geography dimension. A custom aggregate appears in the dimension list in the Selector as a valid dimension value.

How to create a custom aggregate

You can create custom aggregates by choosing the Custom Aggregates command from the Tools menu and using the Custom Aggregates dialog box to specify the names, members, and properties of your custom aggregate.

The following figure illustrates how the Custom Aggregates dialog box looks when you are creating a custom aggregate.
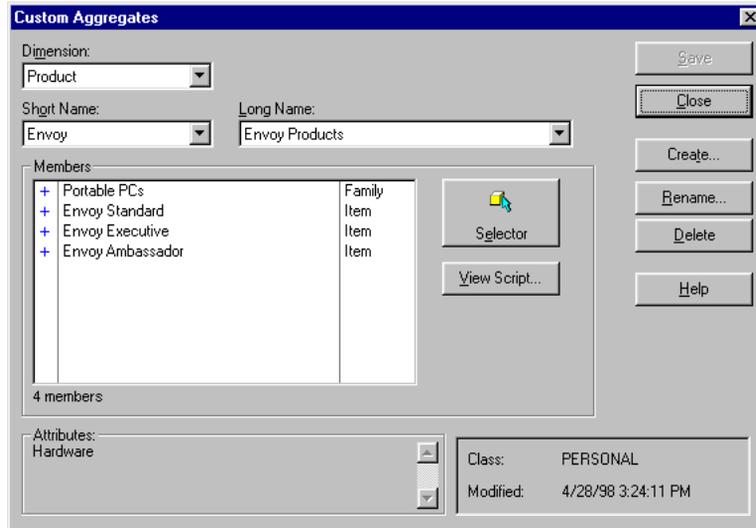
Uses of custom aggregates

These are two of many ways in which you can use custom aggregates:

- If you are a sales analyst, you want to determine product performance based on brand. You can accomplish this by defining custom aggregates that roll all product items for each brand (e.g., Envoy Standard Portable PC, Envoy External Double CD-ROM, Envoy Quad CD-ROM) into one value per brand (e.g., Envoy).

- If you are a sales manager for a territory, you want to review sales on a state by state basis. You can accomplish this by defining custom aggregates for the Geography dimension. For example, you create custom aggregates that roll customers (e.g., Global NYC New York, KLM Enterprises New York, and Warren Consulting New York) for each state into a single value for the state (e.g., New York).

Related information

Search for these topics in the Analyzer Help system:

"Creating Custom Aggregates"
"Modifying Custom Aggregates"

Using Custom Measures

Definition: Custom measures

A custom measure is a formula created by a user, which allows fine-tuning of data analysis. You create custom measures using base measures in the database. For example, if the database contains the existing measure Volume Share, you can use this measure to create a custom measure named Volume Share Year Ago. This custom measure would allow you to look at a product's absolute share from the previous year.

Creating custom measures

Custom measures are created outside of the Selector using the Maintain Measures dialog box. After you create them, they are available for selection in the Selector *Available* box.

The following figure shows the Maintain Measures dialog box. The specifications appearing in the box create a measure that enables you to examine a product's percentage change in sales from the previous year.

Types of custom measures

The following table describes the different types of custom measures that you can create in Analyzer.

Measure Type	Description
Change	Allows you to view changes in a particular measure from period to period.
	For example, you might define a change measure that shows the amount by which a product's sales have changed over the last year.
Difference	Allows you to subtract one existing measure from another.
	For example, you might create a sales less discount measure by subtracting discount from dollar sales.

Measure Type	Description
Fiscal Year-to-Date	Allows you to add a measure's values through the fiscal year-to-date.
	For example, you might define a fiscal year-to-date measure that allows you to compare current dollar sales against quota.
Index	Allows you to calculate the ratio of a measure for a certain dimension value with the same measure in a comparison or reference dimension.
	For example, you might create an index that compares a measure's value in the selected geography to the value in North America.
Lag	Allows you to see the value of a measure for a previous time period.
	For example, you might create a lag measure that compares product sales for the first three months of the current year with sales for the corresponding months of the previous year.
Lead	Allows you to see the value of a measure for a future time period.
	For example, you might create a lead measure that compares product sales for the first six months of the current year with the planned sales for the corresponding months of the upcoming year.
Moving Average	Allows you to average, or "smooth," data over time.
	For example, you might create a measure that calculates the moving average of base volume over the most recent 12 months.
Moving Maximum	Allows you to view the maximum value for a specific measure for the three time periods prior to the current time period.
	For example, you might create a measure that shows the maximum value of units sold for the prior three quarters.
Moving Minimum	Allows you to view the minimum value for a specific measure for the three time periods prior to the current time period.
	For example, you might create a measure that shows the minimum value of units sold for the prior three quarters.

Measure Type	Description
Moving Total	Allows you to sum up the values of a measure over a specified number of periods. For example, you might define a measure that sums up units sold over a certain number of weeks.
Multiplication	Allows you to multiply existing measures and one constant. For example, you might create a dollar sales measure by multiplying price per unit by units.
Nested	Allows you to perform simple nested formula calculations. These formulas take the form (A? B) ? (C ? D) where you can replace each letter with a measure and each question mark with an arithmetic operator. For example, you might create a per capita revenue measure by subtracting costs from sales and dividing the difference by population.
Percent Change	Allows you to view percent changes in measures from period to period or from year to year. For example, you might define a percent change in dollar sales from the previous period.
Ratio	Allows you to divide two existing measures. For example, you might divide sales less discount by population to create a per capita revenue measure.
Share	Allows you to compare a measure's value for the reported product to the same measure's value for a specified share reference point, such as a category or a specific product. Share measures are calculated as percentages. For example, you might calculate the share that "portable PCs" contributed to the totals for "Hardware."
Sum	Allows you to add existing measures and a constant. For example, you might add incremental sales and base sales to get total sales.

Measure Type	Description
Variance	Allows you to calculate the difference between a measure for a certain dimension value and the same measure for a comparison or reference dimension value.
	For example, you might create a variance measure that shows the difference in the measure's values at the item level and the family level.
Year-to-Date	Allows you to sum up measures through the current period of the calendar year.
	For example, if you are in the third quarter of the calendar year, you might create a year-to-date measure that shows cumulative units sold for the first, second, and third quarters of the current year.

Related information

Search for these topics in the Analyzer Help system:

"Creating Custom Measures"
"Maintaining Custom Measures"

8

Managing Information in the Windows Client Environment

Chapter summary

This chapter describes how you manage information in the Windows client environment. It includes information about filing documents in folders, printing documents, exporting documents, and sharing database objects with other Analyzer users.

List of topics

This chapter includes the following topics:

- Managing Documents Using Folders
- Printing Analyzer Documents
- Exporting Data from Reports and Graphs
- Sharing Objects with Other Analyzer Users
- Deleting Analyzer Documents

Managing Documents Using Folders

Definition: Folder

A folder is a database object that allows you to store saved documents in an organized manner. Folders help you organize saved reports, graphs, and forecasts.

How you maintain folders

You create folders, add documents to them, and perform numerous other general maintenance functions using the Maintain Folders dialog box, which you access by choosing **Maintain Folders** from the Tools menu.

The Maintain Folders dialog box is shown following.
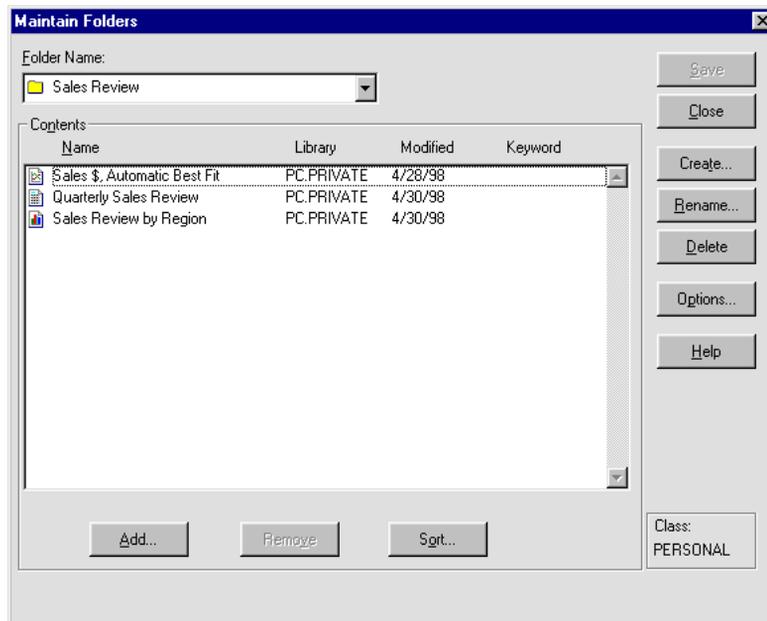
The following table describes the functions of the command buttons in the Maintain Folders dialog box.

Command Button	Function
Add	Enables you to access the Add Documents to Folder dialog box and select documents to add to the folder selected in the Maintain Folders dialog box
Remove	Enables you to remove documents from the folder that is selected in the Maintain Folders dialog box
Sort	Enables you to access the Sort Folder dialog box, where you can sort the documents in the folder that is selected in the Maintain Folders dialog box
Save	Enables you to save the folder that is selected in the Maintain Folders dialog box.
Close	Enables you to close the Maintain Folders dialog box
Create	Enables you to access the Create a Folder dialog box, where you create and name a new folder
Rename	Enables you to access the Rename Folder dialog box and rename the folder that is selected in the Maintain Folders dialog box
Delete	Enables you to delete the folder that is selected in the Maintain Folders dialog box; the documents in the folder are not deleted
Options	Enables you to access the Options for Folder dialog box to choose a bitmap for the folder's icon in Director

Related information

Search for the following topics in the Analyzer Help system:

"Adding Documents to Folders"
"Creating Folders"
"Deleting Folders"
"Removing Documents from Folders"
"Renaming Folders"
"Saving Folders"
"Using Folder Options"

Printing Analyzer Documents

How you print Analyzer documents

You can print the active document in Analyzer by choosing the **Print** command, located on the File menu, or by clicking on the Print button on the Analyzer toolbar.

Analyzer displays the Print Selection dialog box, which is shown following.
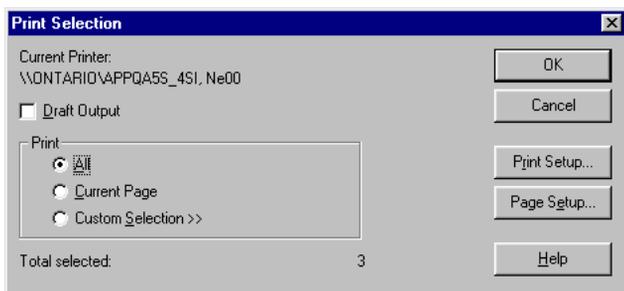
What printing options do you have?

You have the following printing options:

- You can print the entire document.

- You can print the current page.

- You can choose Custom Selection to print a range of pages.

How do you print multiple documents?

You can select more than one document to print by using the **Print Multiple** command from the File menu.

Analyzer displays the Print Multiple dialog box, which is shown following with two reports and a graph selected for printing.
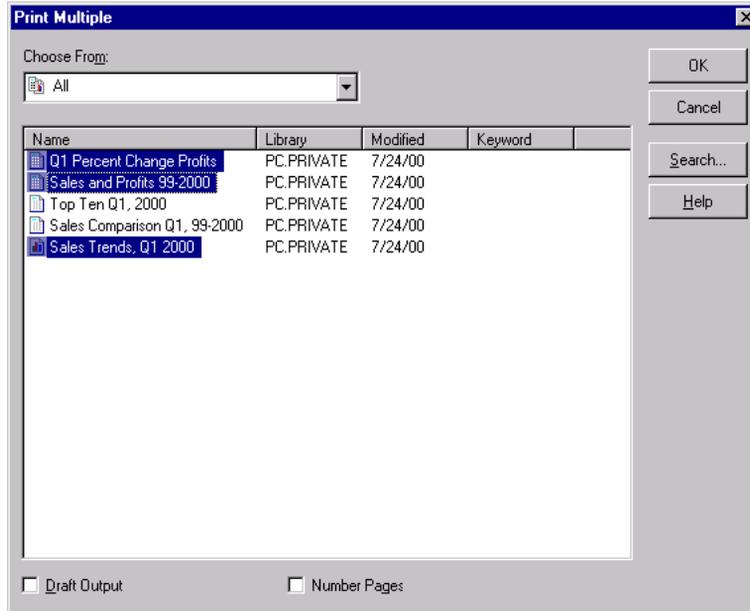
Analyzer print features

The following table describes some of the print features that you can take advantage of in Analyzer.

Feature	Command You Choose	Description
Draft printing	**Print Multiple** from the File menu	If you select Draft Output, you can reduce the amount of time required for printing.
Presentation quality	**Page Setup** from the Format menu	From the Page Setup dialog box you can define headers and footers and determine the final look of printed documents.
Preview	**Print Preview** from the File menu	You can preview any document before printing it to make sure that the document will look the way you want it to. You can change perspective by zooming in or out.

Feature	Command You Choose	Description
Page numbering for single documents	**Page Setup** from the Format menu	Use the Header or Footer buttons in the Page Setup dialog box.
Page numbering for multiple documents	**Page Setup** from the Format menu, then **Print Multiple** from the File menu	If you want to number multiple documents continuously, define headers or footers and then select Number Pages in the Print Multiple dialog box.

Scaling graphs for printing

If your active document is a graph, you can control the size and scale of the graph in printed output by choosing the **Page Setup** command from the Format menu before accessing the Print or Print Multiple dialog boxes.

The following table describes the graph scaling options available in the Page Setup dialog box.

Option	Description
Scale to Fit Page	Analyzer maintains the aspect ratio of the graph as it appears on the screen, and centers the graph on the page. The fonts of text objects remain the same on the printed page as on the screen.
Use Full Page	Analyzer sizes the graph according to the print area specified by the margins. The plot area of the graph changes. The spacing between text objects, such as labels and legend, also changes, but the size of the text objects themselves remains the same as in the "scale to fit page" mode.

Related information

Search for the following topics in the Help system:

"Defining Page Setups"
"Printing Graphs"
"Printing Reports"
"Printing Forecasts"
"Printing Multiple Documents"

Exporting Data from Reports and Graphs

About exporting data

You can export data from Analyzer reports and graphs to files that can be used in Microsoft Excel and other applications. For reports, you can select from three export formats (CSV, XLS, and TXT), and select the pages or values to export. If you choose to export to the XLS file format, you can specify whether the data will be displayed in a single worksheet or in multiple worksheets.

Note: The .xls export uses the most recently installed version of Excel. See the Release Notes for a list of supported versions.

Procedure: Exporting data from a report or graph

To export data from an Analyzer report or graph, follow these steps.

1. Make the document from which you want to export data your active document.

2. From the File menu, choose **Export to File**.

   or

   Choose the **Export** button on the Analyzer toolbar.

   Result: The Export to File dialog box opens.

3. In the File Name box, enter the name of the file to which you want to export data. Use the **Browse** button to select a directory other than the current directory or to choose an existing file as the target for the export.

4. In the Format box, select the file format for the export file. The options that you see depend on whether you are exporting a report or graph:

   - **Microsoft Excel (.xls)** — For a report, exports the data in XLS format, using the current installed version of Excel. For information about supported versions of Excel, refer to the Release Notes.

   - **Comma delimited (*.csv)** — For a report, exports the data in Comma Separated Value format, in which labels and data values are separated by commas.

   - **Tab delimited (*.txt)** — For a report, exports the data in text file format, in which labels and data values are separated by tabs.

- **Windows bitmap (*.bmp)** — For a graph, exports a bitmap image exactly as it appears in Analyzer. In order to export a full size image of a graph, maximize the document window.

5. If you chose **Microsoft Excel (*.xls)** as the export format, click the **Options** button to open the Excel Options dialog box, where you can you can specify how the system will handle the export to Excel:

- In the Export Pages box, choose **Multiple Worksheets** to display the data on one worksheet per logical page. To create a table of contents for the worksheets, choose **Table of Contents**. Choose **Single Worksheet** to export the data to a single worksheet.

- Choose **Exclude Formatting** to export the data without formats for fonts, color, and so forth. Clear **Exclude Formatting** to export the data with its current formatting

6. In the Selection box, select the page range for the export. The options that you see depend on whether you are exporting a report or graph:

- **All** — For a report, exports data from all pages of the document.

- **Current Page** — Exports data from the current page of the document.

- **Custom Selection** — For a report, exports pages and values that you specify. If you chose this option, the dialog box expands. Use the Paging Dimension box and Values to Export box to specify a custom selection of pages.

7. Choose **OK** to export the file.

Export file size

If you are exporting to the XLS file format and the size of the file that you are exporting exceeds the maximum size for your version of Excel, a warning message will appear.
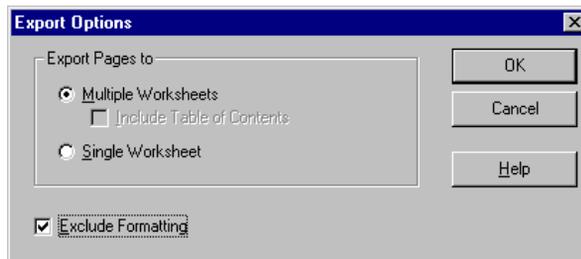
Example: Exporting data

The following illustration shows the Export to File dialog box for a report document.
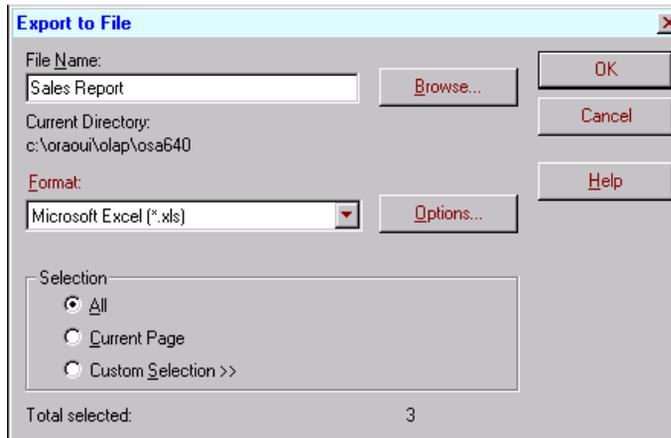
Example: Export options

The following illustration shows the options for an XLS export.

Related information

Search for this topic in the Analyzer Help system:

"Exporting Data to Other Applications"

Sharing Objects with Other Analyzer Users

Definition: Libraries

An Analyzer library is a repository for saved database objects.

Private libraries

Each user has read-write access to a *private* library for personal customizations in that user's personal database.

Public libraries

User groups have public libraries that reside on LANs or remote computers.

How Analyzer users share objects

Documents and other objects that you create and save are stored in your personal database. You have automatic read-write access to this database and to the *private library* that contains the saved objects. You can share your personal objects with other users by publishing them to a public library to which you have read/write access.

If you are working in thick client mode, you can also make saved objects available to other users by publishing them from your PC to files on a diskette.

Database objects that can be shared

The following database objects can be shared among libraries:

- Custom aggregates
- Custom measures
- Data cubes
- Folders
- Graphs
- Reports
- Forecasts
- Saved selections
- Slice databases

Maintain Libraries dialog box

You use the Maintain Libraries dialog box to publish objects. To access the Maintain Libraries dialog box, choose **Maintain Libraries** from the Tools menu.

The Maintain Library dialog box is shown following, with specifications for a user to publish a document from the private library on the PC to the Master library on the server.
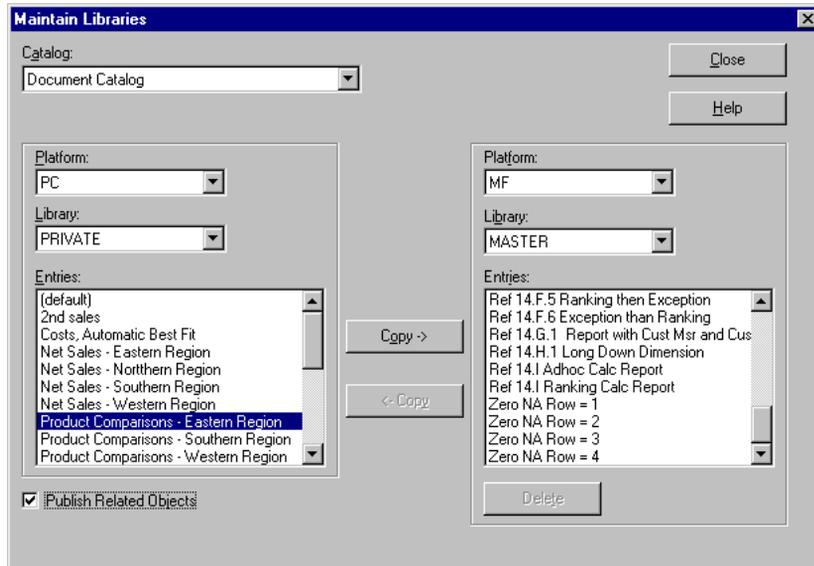
Guidelines for sharing data

When you share objects with other users, the users will need access to the dimension values that your published objects reference.

Users will also need access to related objects. For example, if you publish a report that includes a custom aggregate, users will need access to the custom aggregate. You can use one of two methods to make related objects available to users:

- When you publish the main object (for example, a document), you can check the **Publish Related Objects** box. This automatically includes all related objects (custom measures, custom aggregates, and saved selections) in the publishing process.

- You can manually publish each referenced object.

Note: In either case, users will require access to the dimension values that your objects reference. For example, if you publish a custom aggregate that includes New York and Boston, only those users who have access to these geography dimension values will be able to use the report without seeing an error.

Related information

Search for these topics in the Analyzer Help system:

"Copying Objects from Libraries"
"Copying Objects to Libraries"

Deleting Analyzer Documents

How you delete saved documents

You delete Analyzer documents by choosing **Delete** from the File menu. Choosing this command will display the Delete dialog box. You can delete any document for which you have read/write access. If you try to delete an open document, Analyzer will close it before deleting it.

Note: Deleting a forecast document

Deleting a forecast document also deletes its corresponding forecast measure (that is, the measure created using the Forecast Wizard). This is the only way to delete a forecast measure.

Delete dialog box

The Delete dialog box is pictured following. Two documents have been selected for deletion.
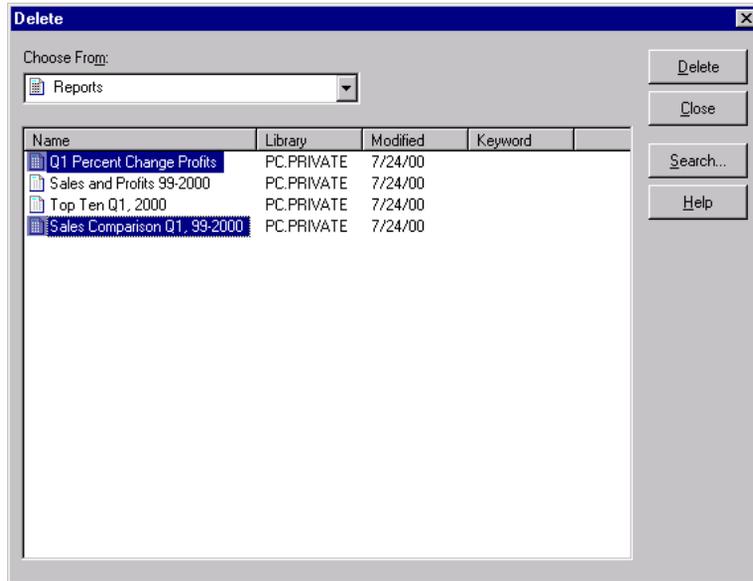
Related information

Search for these topics in the Analyzer Help system:

"Deleting documents"
"Deleting graphs"
"Deleting forecasts"
"Deleting reports"

9

Adding Calculations to Windows Client Reports

Chapter summary

Analyzer enables you to add calculations to reports by constructing formulas and attaching them to rows, columns, or cells that you insert. This chapter explains what calculations are and describes how to use them. The information applies to the Windows client environment.

List of topics

This chapter includes the following topics:

- Introduction to Calculations
- Introduction to Formulas
- Inserting Formulas into Reports
- Constructing Formulas
- Editing and Moving Existing Formulas
- Using Report Calculations in a Business Analysis
- Error Codes for Report Calculations

Introduction to Calculations

Definition: Calculation

In Analyzer, a calculation is a row, column, or single cell of data that is calculated using the data in the other rows, columns, or cells of the report.

Analyzer enables you to add calculations to reports by attaching a *formula* to a row, column, or individual cell that you insert. The results of the calculation are displayed in the cells of the inserted row or column.

Example: Calculation

In your role as sales manager, you want to review average sales for all of the customers in each territory.

You start by creating a report in which each row contains sales figures for an account. Then you insert a new row and construct a formula that calculates average sales for the accounts in each territory.

Introduction to Formulas

Definition: Formulas

The formulas that are used in report calculations are simple algebraic expressions.

Formulas can include the following components:

- Functions
- Dimension values
- Operators
- Numeric literals
- Other formulas

Components used in Analyzer calculations

The formulas used in Analyzer calculations are described in the following table.

Component	Description
Functions	You can include functions in formulas to perform specific operations on numeric literals and dimension values.
Dimension values	You can include dimension values in formulas. All dimension values must be enclosed in single quotes.
Operators	Operators include the unary minus symbol (-) and the standard binary operators for addition (+), subtraction (-), multiplication (*), and division (/). Conventional rules for evaluating algebraic expressions apply: ■ If a formula contains multiple subexpressions (distinguished from the main expression by parentheses), then the subexpressions are evaluated first; then the main expression is evaluated. ■ Operators are evaluated from left to right. Negative symbols are evaluated first; followed by multiplicative operators (*, /), followed by additive operators (+, -). ■ Parentheses can be used to indicate the order of operations.
Numeric literals	Numeric literals are real numbers (decimal numbers) or integers (non-decimal numbers) that contain up to 15 digits, as follows: ■ Real numbers have a decimal point with digits on both sides. Real numbers can begin with the unary minus symbol (to indicate a negative value) and can include exponential notation (d, D, e, or E). ■ Integers are whole numbers and can include the unary minus symbol to indicate a negative value. Integers do not include a decimal point or exponential notation.
Other formulas	Formulas can refer to other formulas by their labels. The label names must be enclosed in single quotes.

Inserting Formulas into Reports

Inserting a row or column

In order to insert a formula into a report, you first need to insert a new row or column.

You start by clicking on a row or column label to select it. Then, you choose the **Insert** command either from the Edit menu, or by clicking the right mouse button and choosing **Insert** from the menu that is displayed.

Analyzer displays the Insert Rows or Insert Columns dialog box, depending on whether you selected a row or column label.

The Insert Rows dialog box is shown following.
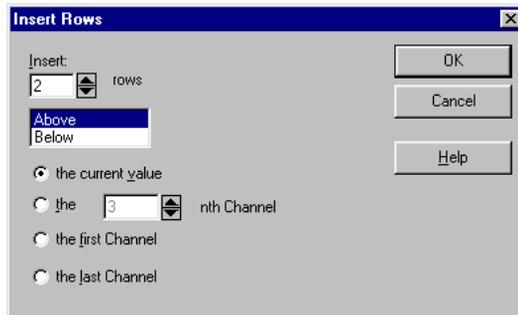
Displaying the edit bar

The edit bar is part of the Analyzer window. Displaying or hiding the edit bar is an Analyzer option, so it may not be visible. If you don't see the edit bar, select the **Show Edit Bar** check box in the General tab of the Options dialog box.

The following figure shows the edit bar.

The following table describes the buttons on the edit bar.

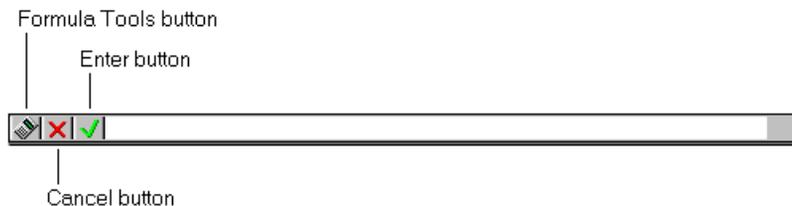| Button	Description
Formula Tools button	Puts Analyzer into formula edit mode and opens the Formula Tools dialog box. See "Constructing Formulas" on page 9-6.
	If you choose this button after selecting the label of a row or column that already has a formula attached, then that formula is displayed in the edit bar, where you can make changes to it.
Enter button	In formula edit mode, causes Analyzer to calculate the formula and display its results in the data cells of the inserted row, column, or cell.
	In standard edit mode, causes Analyzer to apply the contents of the edit bar to the chosen document label or title.
	Alternatively, you may press the Enter key.
Cancel button	In formula edit mode, ends formula editing and returns any formula that is in the edit bar to its last saved modification.
	In standard edit mode, cancels editing of the chosen document label or title.

Deciding where to insert a formula

You choose the row highlighter or column highlighter to insert a formula into an entire row or column on a report. The results of the formula will appear in the cells of the selected row or column.

You choose a particular cell in an inserted row or column to insert a formula into a single cell. The results of the formula will appear only in that cell.

Formula edit mode

Formula edit mode is invoked when you select a row, column, or cell in which a calculation is present and then create or edit the formula in the edit bar. You invoke formula edit mode automatically when you choose the Formula Tools button.

In formula edit mode, the *result side* of a formula (information to the left of the = sign) is displayed in the edit bar, and most of the command menus in the Analyzer toolbar become disabled. To leave formula edit mode, you choose the Cancel or Enter button on the edit bar, or press the Enter key.

Related information

Search for the following topic in the Analyzer Help system:

"Inserting Formulas in Reports"

Constructing Formulas

Overview

You construct a formula either by using the Formula Tools dialog box, or by manually entering a formula in the edit bar text box.

Constructing a formula with the Formula Tools dialog box

You construct a formula by selecting one or more items (that is, a function, dimension value, numeric literal, or operator) from the Formula Tools tabs, and choosing the **Apply** button to insert the selected item into the Formula script box at the bottom of the Formula Tools dialog box.

Alternatively, you can manually type a formula in the Formula box that appears at the bottom of each of the Formula Tools tabs.

The position of the cursor in the Formula script box determines where, in the formula, an item is placed. You can change the position of the cursor by clicking on its new position in the Formula script box.

Choose the **OK** button in the Formula Tools dialog box to close the dialog box and save the formula. Choose the **Cancel** button to discard changes and return the formula to its last saved modification.

Once you close the Formula Tools dialog box, the formula you constructed will appear in the edit bar text box. Choose the Enter button on the edit bar to apply the formula and display its results in the report.

The Formula Tools dialog box consists of five tabs:

- Functions
- Values
- Keypad
- Data Handling
- Qualify

Formula Tools — Functions tab

You add a function to a formula either by double-clicking on the function name in the list, or by highlighting a function name in the list and choosing the **Apply** button. Every function is followed by a pair of parentheses, which must enclose the function's arguments.

The Functions tab of the Formula Tools dialog box is shown following. In this example, the AVG function has been added to the formula, with an argument of Geography. This formula will calculate the average sales for all of the geography dimension values in the report.
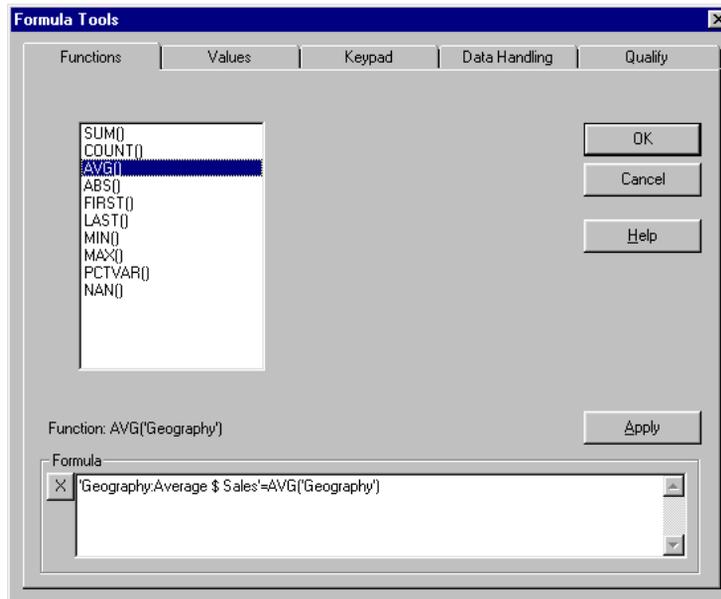
The functions that you can use in formulas are described in the following table. Functions accept numeric literals and dimension values as arguments.

Function	Description
ABS7	Returns the absolute value of a single argument that you select.
	The argument must be the label text of a single dimension value or other formula.
AVG	Returns a simple non-weighted average of the arguments you select. The arguments must be the label text for single dimension values or other formulas.
	If you enter the function without specifying a dimension value name, then the function applies to all of the values in status. For example, AVG('Product') will return the average for all Products in status.
COUNT	Counts how many items are in the list of arguments that you select. The arguments must be the label text for single dimension values or other formulas.
	If you enter the function without specifying a dimension value name, then the function applies to all of the values in status. For example, COUNT('Product') returns the number of Products in status.
FIRST	Returns the value of the first argument, which is the first real value in the dimension or in a list of specified arguments.
	The arguments must be the dimension name enclosed in single quotes or other formulas.
LAST	Returns the value of the last argument, which is the last real value in the dimension or in a list of specified arguments.
	The arguments must be the dimension name enclosed in single quotes or other formulas.
MAX	Returns the largest number in the list of arguments that you select or of all the values in status.
	The arguments must be the dimension name enclosed in single quotes or other formulas.
MIN	Returns the smallest number in the list of arguments that you select or of all the values in status.
	The arguments must be the dimension name enclosed in single quotes or other formulas.
NAN	Places an NA value in the specified cell or cells.

Function	Description
PCTVAR	Returns the absolute percentage difference between two arguments. PCTVAR is defined as follows: `PCTVAR(arg1,arg2) = 100*(arg1-arg2)/abs(arg2)` Each argument must be a formula or the label text of a single dimension value.
SUM	Adds all the values that you select in a dimension. Each argument must be one of the following: ■ A formula ■ A dimension name enclosed in single quotes ■ The label text of a single dimension value If you enter the function without specifying a dimension value name, then the function applies to all of the values in status. For example, SUM('Product') returns the sum for all Products in status.

## Note: Applying functions to all of the values in status

When you insert a function, the text between the parentheses that follow the function name represents the name of the dimension and a value of that dimension, such as AVG('Geography:Computer USA Tempe'). If you enter functions without specifying particular dimension values, such as AVG ('Geography'), then Analyzer applies the function to all of the values in status. In this example, the AVG function would be applied to all of the Geography values in status.

Formula Tools — Values tab

You use the Values tab to select individual dimension values that a formula's *expression* (the information to the right of the = sign) will reference. You insert values into the formula either by double-clicking on their names in the list, or by highlighting their names in the list and choosing the **Apply** button.

The Values tab of the Formula Tools dialog box is shown following. The SUM function has already been added from the Functions tab. Geography dimension

values that represent four customers in San Jose have been inserted from the list in the Values tab. This formula will calculate the sum of sales to customers in San Jose.
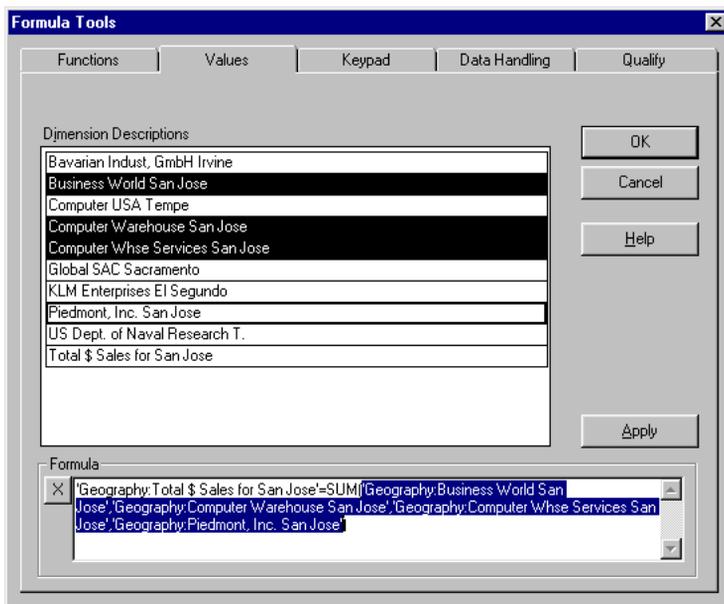

Formula Tools — Keypad tab

You use the Keypad tab to insert numeric literals and operators into a formula's expression (the information to the right of the = sign). Choosing a value on the keypad inserts it into the formula.

The Keypad tab of the Formula Tools dialog box is shown following. In this example, the expression /4 has been inserted into the formula, using the keypad.

Total annual sales for all customers is divided by four to calculate average sales per quarter.
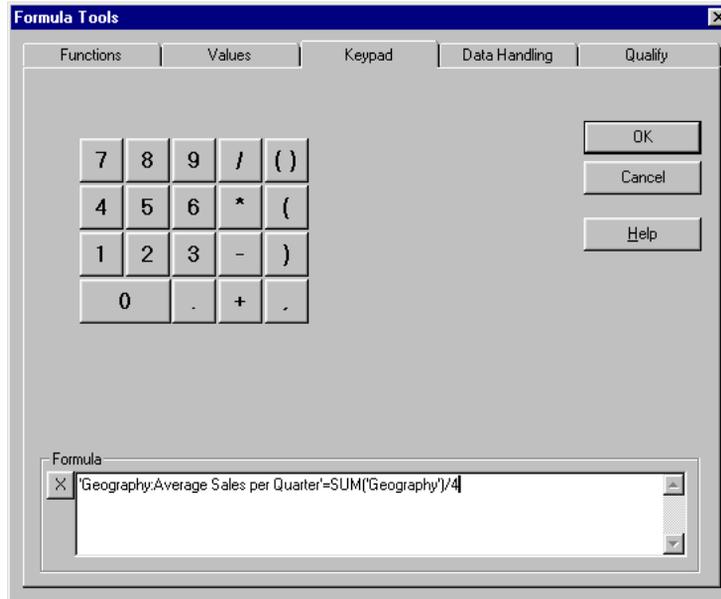
Formula Tools — Data Handling tab

You use the Data Handling tab to specify how Analyzer handles non-numeric and unavailable data references.

The Data Handling tab of the Formula Tools dialog box is shown following. In this example, the user has elected to exclude NA values and text in the formula.
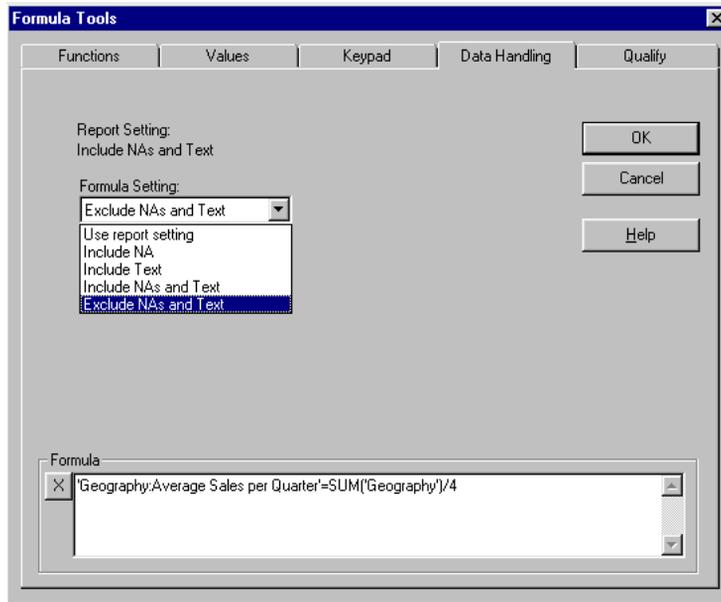
Selecting a data handling method

The following table describes the data handling choices that you can use with report calculations.

Data Handling Method	Description
Use report setting (default)	The formula will handle NAs and text values in the calculation as indicated by the Report Setting label.
Include NA	Analyzer includes NAs, but excludes text values in the calculation.
Include Text	Analyzer includes text values but excludes NAs in the calculation.
Include NAs and Text	Analyzer includes NAs and text values in the calculation.
Exclude NAs and Text	Analyzer excludes both NAs and text values in the calculation.

Formula Tools — Qualify tab

You use the Qualify tab to specify dimension references for either the result side (to the left of the = sign) or the expression side (to the right of the = sign) of a formula.

The Qualify tab of the Formula Tools dialog box is shown following. Specific values for the Geography and Time dimensions have been selected and inserted into the formula. The resulting calculation will consider only the data in the report that corresponds to the dimension values that are specified.
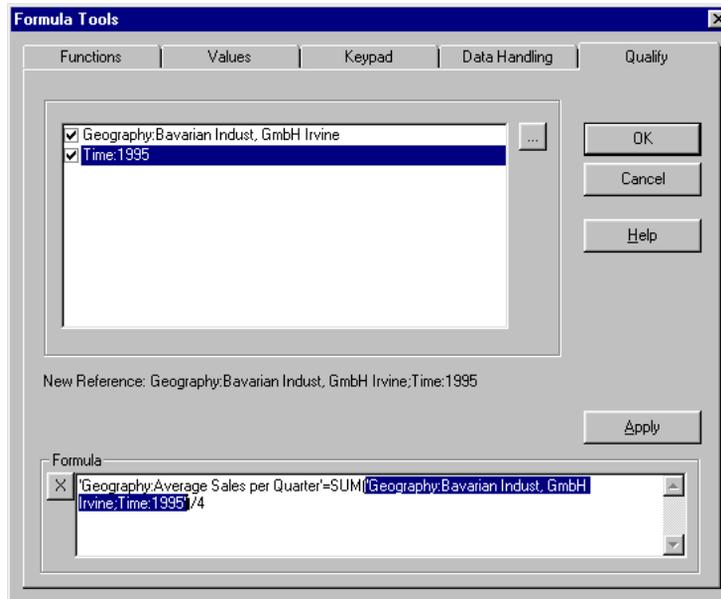
Constructing a formula manually

As an alternative to constructing a formula with the Formula Tools dialog box, you can manually enter a formula into the edit bar text box. The edit bar will expand vertically to accommodate your entry, if extra space is needed.

When Analyzer is in formula edit mode, you can automatically enter references to other values in a report into a formula by using the mouse to choose other cells in a report. When you choose another cell in a report, its reference is displayed in the edit bar as part of the formula's expression.

You apply a formula to a report by choosing the **Enter** button or pressing the Enter key. The formula's results will be displayed in the area of the report that corresponds to the row, column, or cell you have specified.

Related information

Search for the following topics in the Analyzer Help system:

"Inserting Formulas in Reports"
"Formula Syntax"
"Formula Tools Dialog Box"
"Formula Tools Dialog Box — Data Handling Tab"
"Formula Tools Dialog Box — Functions Tab"
"Formula Tools Dialog Box — Keypad Tab"
"Formula Tools Dialog Box — Qualify Tab"
"Formula Tools Dialog Box — Values Tab"
"Setting Analyzer Options"

Editing and Moving Existing Formulas

Editing an existing formula

You can edit any formula that is inserted in an active report. Choose the row highlighter, column highlighter, or cell into which the formula you wish to edit has been inserted. Analyzer will enter formula edit mode and will display the inserted formula in the edit bar.

You edit a formula by manually typing changes in the edit bar text box, or by choosing the Formula Tools button and making changes using the Formula Tools dialog box.

Note: To delete items from a formula using the Formula Tools dialog box, click and drag your mouse in the Formula text box to highlight the text you want to remove, then choose the Delete key. Choose OK to accept the changes you have made, or choose the **X** button to discard your changes.

Choose the Enter button on the edit bar to apply changes to the report, or choose the **Cancel** button to return the formula to its last saved modification.

Moving an existing formula

You use the Move Insert dialog to move an existing formula within an active report.

First, choose the row or column label of an inserted row or column — not the data cell or cells in the report — then choose **Move Insert** from the Edit menu to open the Move Insert dialog box. Choosing **OK** causes Analyzer to move the formula.

The Move Insert dialog box is shown following.
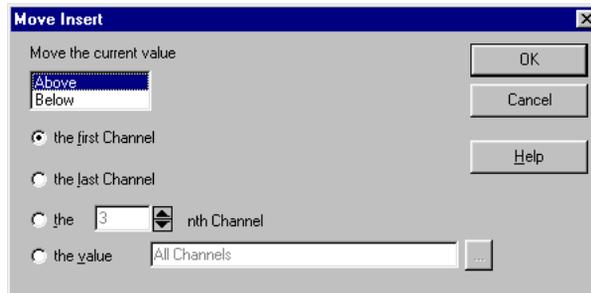
Related information

Search for the following topics in the Analyzer Help system:

"Editing Formulas"
"Formula Tools Dialog Box"
"Moving Formulas"

Using Report Calculations in a Business Analysis

The business scenario: Summarizing sales data

Suppose you are a sales manager, and you want to review sales for your accounts in each state. Even though the sales data in your database is not organized according to state, you can construct a report calculation to summarize the data in that way.

The following Analyzer report shows sales information for 1996 and 1997 for all your products that were sold through all channels in the Western United States territory.

What information do you need?

You have accounts in two states, California and Arizona, and you want to examine your annual results for each state. Since there is only one customer in Arizona, Computer USA Tempe, you do not need a formula to calculate total sales for Arizona. You do, however, need to construct a formula to calculate total sales for all of your accounts in California.

How you get the data

Insert a row

You begin by inserting a blank row between the final California customer, US Dept. of Naval Research T., and Computer USA Tempe.

You use the edit bar to give the inserted row the title "Total California".

The report with the inserted row is shown following.

Construct the formula

Choose the Formula Tools button to activate the Formula Tools dialog box.

Next, you select the SUM function from the list in the Functions tab, and choose the **Apply** button to add the function to the formula.
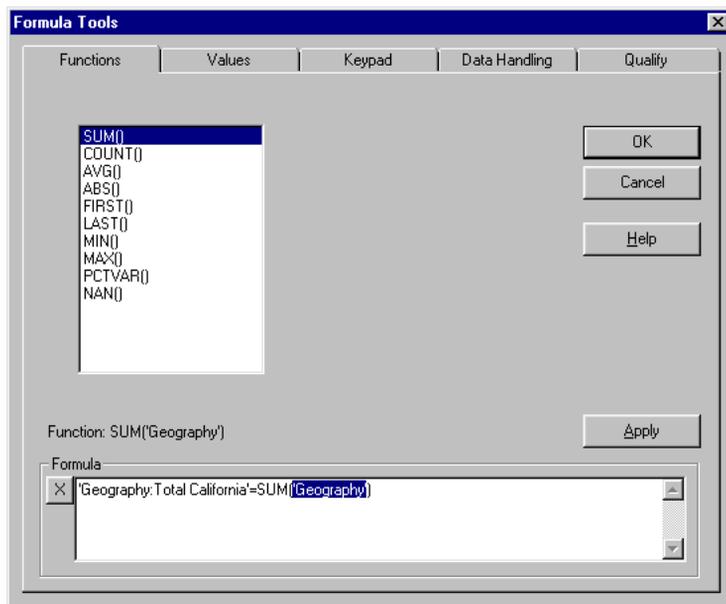
Next, you proceed to the Values tab and use the mouse or arrow keys to choose your California customers.

Choose the **Apply** button to add the customers to the SUM function.
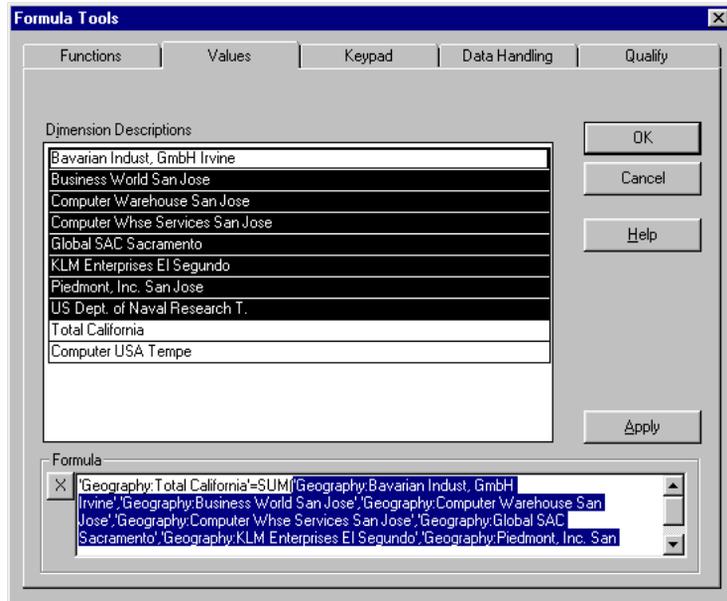
Choose the **OK** button to close the Formula Tools dialog box. Analyzer displays the constructed formula in the expanded edit bar.

Choose the Enter button on the edit bar to calculate the formula and show the data in the cells of the Total California row.

The report with the embedded calculation is shown in the following figure.

Related information

Search for the following topics in the Analyzer Help system:

"Expanding the Edit Bar"
"Formula Syntax"
"Inserting Formulas in Reports"

Error Codes for Report Calculations

What happens when a formula cannot be calculated?

If you attempt to use a formula that does not have the correct syntax or cannot be calculated, then Analyzer will show an error message or display an error code.

List of error codes

The following table describes the error codes that are displayed in a report when a report cell cannot be calculated properly.

Error Code	Meaning and Remedial Action
#CIRC!	The formula contains a circular reference.
	Modify the formula to eliminate the circular reference.
#DIV/0!	The formula is trying to divide by zero.
	Modify the formula to eliminate division by zero.
#MISSING!	A value referenced in a formula is no longer in status.
	Put the value back in status or modify the formula.
	Note: This error can occur if one of the dimensions used in a valid calculation is re-oriented from one edge (row or column) of a report to a different edge. For a calculation to be valid, it must include all the dimensions on an edge.
#NAME!	Analyzer does not recognize a function name.
	Modify the incorrect function name.
#NUM!	A number in the formula does not conform to the rules for numeric literals.
	Check the numbers and modify the formula.
#VALUE!	The formula contains the wrong type or number of operands. This happens if calculations are used on text data.
	Check the type and number of operands and modify the formula.

10

Creating and Using Forecasts in the Windows Client Environment

Chapter summary

This chapter describes how to create and work with forecasts in the Windows client environment.

List of topics

This chapter includes the following topics:

- Introduction to Forecasting
- Forecasting Methods
- Forecasting Situations
- Choosing a Forecasting Method
- Creating a Forecast
- The Forecast Document
- Evaluating a Forecast

Introduction to Forecasting

Definition: Forecast

A *forecast* is an estimate of a measure based on its historic values. Every forecast is based on the assumption that future values of a *time series* (that is, a measure dimensioned by Time) can be derived from past values. Typically, forecasts are used to predict future, unknown measure values.

In Analyzer, a forecast is composed of both a forecast measure and a forecast document. You create forecast measures and forecast documents using the Forecast Wizard.

Example: Forecast

In your role as distribution manager, you want to estimate monthly shipments of your product for the coming season. You base the estimate on historic data that is stored in a Shipments measure.

You follow the steps in the Forecast Wizard to specify and run your forecast. The wizard will create a forecast document that compares the historic values of the Shipments measure with the estimated (forecast) measure both graphically and statistically. Using the information the document provides, you can choose either to save your forecast or to re-run it using different criteria.

Forecasting Methods

Overview

Analyzer offers a comprehensive set of eight forecasting methods, plus an option to let Analyzer determine the best method for a given forecasting situation. No single method is the best choice for every situation. This topic details each of the forecasting methods and their required parameters.

Holt-Winters

Perhaps the most robust of the methods Analyzer offers, the Holt-Winters method decomposes data into three related components: a "smoothed" series, a seasonal series, and a trend series. The Holt-Winters method performs best when it is applied to strongly seasonal data (for example, sales of cold medicine).

The Holt-Winters method requires two full seasons' worth of supporting data, and a single parameter, *periodicity*, which is defined as the number of time periods in a season.

For example, if your forecast considers monthly data, and each seasonal cycle is a full year (12 months), periodicity is 12. If your forecast examines yearly data, and each seasonal cycle is two years, periodicity is 2.

Periodicity must be at least 2 for any Holt-Winters forecast, and the number of supporting data time periods that are specified must be at least twice the value of periodicity. For example, if periodicity is 6, you must specify a range of at least 12 supporting time periods.

Single, Double, and Triple Exponential Smoothing

Exponential smoothing is a system of weighted averages which effectively "smoothes out the bumps" in your data. Analyzer offers three distinct types of exponential smoothing:

- *Single Exponential Smoothing* is best suited to stationary data, whose average value stays relatively constant over time, despite short-term variation (for example, hours worked per week).

- *Double Exponential Smoothing* is accomplished by further smoothing a set of data, and is well-suited to linear data, whose average value tends to increase or decrease steadily over time (for example, income).

- *Triple Exponential Smoothing* is accomplished by a third smoothing calculation, and performs best with non-linear data whose average value increases or decreases, at increasing or decreasing rates, over time (for example, the long-term Dow Jones Industrial Average).

Each exponential smoothing method requires a single parameter, a *smoothing constant*, which is the weight applied to a measure's most recent value. The smoothing constant must be between 0 and 1, inclusive. The closer the smoothing constant is to zero, the more pronounced the smoothing will be. Experiment with different smoothing constant values to obtain the best results.

Moving Average

The Moving Average method calculates a moving average of a set of data. This method is simpler than exponential smoothing in that no weighting occurs. The Moving Average method ignores NA data, and is best suited to stationary data.

The Moving Average method requires two parameters:

- *Lag* represents the number of periods prior to the current period to include in the average.

- *Lead* represents the number of periods beyond the current period to include in the average.

For example, specifying a lag value of 2 and a lead value of 2 would cause Analyzer to calculate a 5-period moving average (using data from the two prior periods, the current period, and the next two periods).

Linear Trend

The Linear Trend method models your data as a straight line. It requires no parameter, and performs well with linear data. This method provides a rough assessment of a measure's trend and direction.

Exponential Trend

The Exponential Trend method models your data as an exponential curve. It requires no parameter, and is best suited to non-linear data. This method provides a rough assessment of a measure's trend and direction.

Percentage Change

The Percentage Change method applies a measure's observed period-to-period percentage changes directly to the user-defined set of forecast time periods. It is best suited to stationary and linear data.

The Percentage Change method requires a single parameter, a *lag* value, which represents the number of time periods prior to the current period from which to calculate a percentage change.

For example, a lag value of 2 indicates that the percentage change will be calculated based on the difference between the current time and the time two periods prior. A lag value of 1 is suitable for most situations.

Automatic Best Fit

Though not a forecasting method in its own right, the Automatic Best Fit option evaluates the selected measure, dimensions, and time periods using every applicable method, and chooses the method and parameters that yield the smallest overall percentage difference between the measure and its forecast.

Note: The Percentage Change method is not considered when using Automatic Best Fit.

Once Analyzer determines the best method and parameters, your forecast document is generated automatically, using the entire set of dimension values and data you have selected. The method and parameters that Automatic Best Fit used to create the forecast are displayed in the status bar.

Important: Automatic Best Fit and dimension values

Analyzer considers only the *first selected dimension value* for each of a measure's non-time dimensions, in determining the Automatic Best Fit.

For example, if your selection includes three products, three geographies, and two channels, the Automatic Best Fit option will consider only the data for the first selected product, the first selected geography, and the first selected channel in determining the best method and parameters to use. You decide which dimension value is the first value by changing the order of the values that are listed in the Selected box of the Selector.

Related information

For more information about how Analyzer calculates forecasts, see Appendix A.

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting Methods"

Forecasting Situations

Overview

Analyzer offers eight distinct forecasting methods. Each method is suited to a particular forecasting situation. By understanding both the nature of your forecasting situation and the characteristics of the methods that Analyzer offers, you increase the chances that your forecast will be useful and accurate.

Aspects of your forecasting situation

Consider the following aspects of your situation when choosing a forecasting method:

- The time horizon to be forecast:
    - Immediate — Less than one month
    - Short — One to three months
    - Medium — Three months to two years
    - Long — More than two years
- The pattern the measure exhibits:
    - Seasonal — The measure varies seasonally
    - Stationary — The measure's average value changes little over time
    - Linear — The measure's average value increases or decreases over time, at a steady rate
    - Non-linear — The measure's average value increases or decreases over time, at a variable rate
- The minimum number of observations each method requires

Related information

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting Methods"

Choosing a Forecasting Method

Matching a forecasting method with your situation

The following table summarizes the applicability of Analyzer's forecasting methods to many forecasting situations.

Method	Time Horizon	Data Pattern	Minimum Number of Observations
Single Exponential Smoothing	Immediate, short	Stationary	2
Double Exponential Smoothing	Immediate, short	Linear	3
Triple Exponential Smoothing	Immediate, short	Non-linear	4
Moving Average	Immediate, short	Stationary	3
Holt-Winters	Short to medium	Seasonal	2 seasons
Linear Trend	Medium, long	Linear	3
Exponential Trend	Medium, long	Non-linear	3
Percentage Change	Medium, long	Stationary, linear	2

Letting Analyzer choose the forecasting method

Instead of specifying a forecasting method, you can allow Analyzer to choose a forecasting method for you by choosing **Automatic Best Fit**.

This option will evaluate your forecasting situation using every possible combination of forecasting methods and parameters. Your forecast document will be created automatically, using the method and parameters that yield the smallest overall percentage difference between the measure and its forecast.

Related information

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting Methods"

Creating a Forecast

Using the Forecast Wizard

To create a Forecast, choose **New** from the File menu or the toolbar, and select **Forecast** in the New dialog box. You can also access the Forecast Wizard for an open forecast document by choosing the wizard icon in the lower right-hand corner of any forecast document.

The Forecast Wizard consists of four steps that guide you through the process of specifying a forecast. As you proceed through the steps, a script, which serves as a reminder, records the choices you have made in each step. Helpful hints and tips appear in the lower left-hand corner of each step.

When you have completed all the tasks in a step, choose **Next** to proceed to the next step, or **Back** to return to the previous step. When you have completed the last step, choose **Finish** to run your forecast.

Step 1: Choosing a measure and its dimension values

In the first step of the Forecast Wizard, you start by choosing a measure to forecast. Once you have chosen a measure, you use the Selector to choose the dimension values to which your forecast will apply.

Note: The more dimension values you choose in the Selector, the more time it will take to calculate your forecast.

The following figure shows an example of Step 1 of the Forecast Wizard. The measure Sales $ and values for its base dimensions, Geography, Product, and Channel, have been chosen.
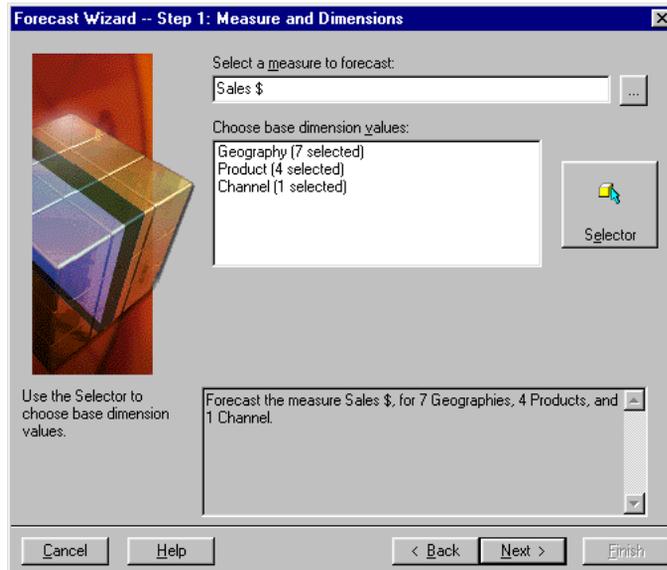
Step 2: Choosing a forecast method

In the second step in the Forecast Wizard, you choose a forecast method. You can either choose a method from the drop-down list in the Forecasting Method box, or choose the **Automatic Best Fit** option.

If the method you choose requires additional parameters, you must also enter them before proceeding to Step 3.

The following figure shows an example of Step 2 of the Forecast Wizard. The Holt-Winters method has been chosen, and the number of time periods in a season (periodicity) is specified as 6.
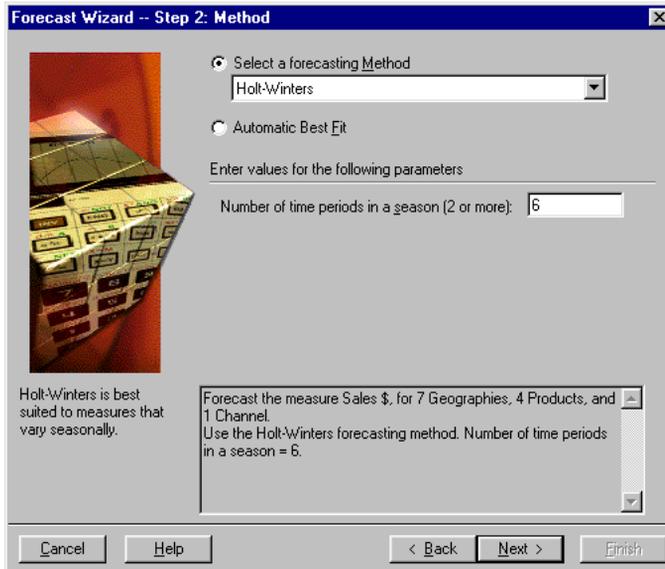
Step 3: Choosing time values

In this step, you choose the level and values of the Time dimension to be considered in calculating your forecast.

First, you choose a Time level from the Time Level box. The other boxes in the dialog box will be filled in with default values, based on your choice.

Next, you choose two ranges of time values — a supporting data range and a forecast range:

- The supporting data range represents the Time values that contain the actual data on which your forecast calculation will be based.

- The forecast range represents the time values into which your data will be forecast (future time periods).

Note: A forecast can include Time values at a single level only. If you wish to forecast the same information for a different Time level, you must either modify an existing forecast or create a new forecast.

The following figure shows an example of Step 3 of the Forecast Wizard. Month has been chosen as the time level, 36 supporting time periods have been chosen, and 18 forecast time periods have been chosen.

Step 4: Describing and running a forecast

In the final step of the Forecast Wizard, you type both a short name and a long name for your forecast, as well as any comments you wish to retain.

The long name field is filled in automatically, but you can change it. The Long name will appear as the title of the resulting forecast document. Any comments you type are saved with your forecast.

The following figure shows an example of Step 4 of the Forecast Wizard. Choosing **Finish** in Step 4 runs your forecast.
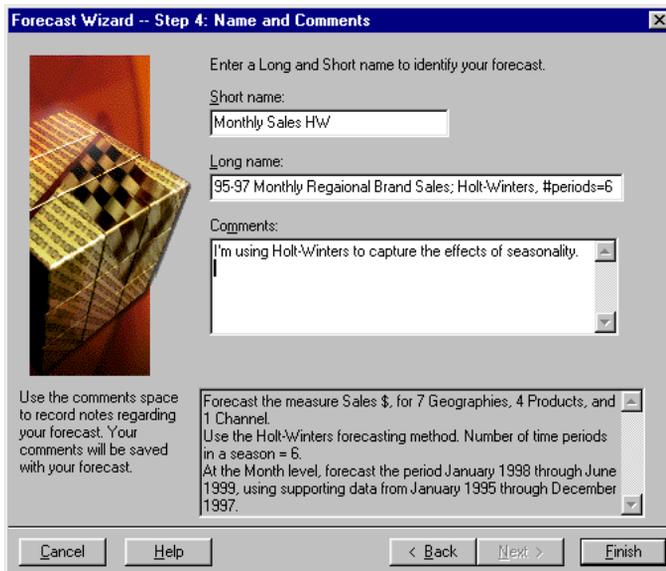
Related information

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting"

The Forecast Document

Forecasts

A *forecast* is an estimate of a measure based on its historic values. Every forecast is based on the assumption that future values of a *time series* (that is, a measure dimensioned by Time) can be derived from past values. Typically, forecasts are used to predict future, unknown measure values.

The forecast document graphic and statistical information for future time periods. A forecast document includes a graph component and a report component. In the graph, the Measure dimension always appears along the vertical axis, and the Time

dimension always appears along the horizontal axis. The measure values that are shown in the graph exactly match the values for the corresponding time periods in the report.

The following figure shows an example of a forecast document.
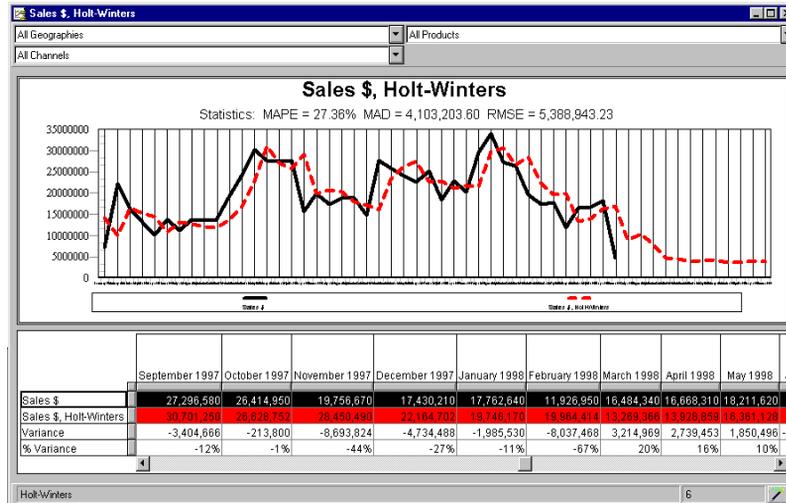
Variance calculations

Every forecast document report includes two variance calculations in addition to the measure and its forecast. The calculations show the difference and percentage difference between each measure and forecast value.

The variances are calculated as follows:

- Variance = Forecast - Measure
- % Variance = 100 * (Forecast - Measure) / Measure

These calculations are not shown in the graph.

Related information

Search for the following topics in the Analyzer Help system:

"Forecast Windows"
"Overview of Forecast Documents"

Evaluating a Forecast

Overview

The forecast document is designed to help you evaluate your forecast. Whereas the graph provides a convenient visual comparison of a measure and its forecast, the summary statistics reveal facts about your forecast that may not otherwise be evident.

Understanding the summary statistics

The subtitle of every forecast document shows three values labeled MAPE, MAD, and RMSE. These are summary statistics that are related to your forecast for the currently selected dimension values. When you select a new dimension value from a drop-down list box at the top of a forecast document, these statistics are automatically recalculated.

The following three statistics are shown in the subtitle of every forecast document:

- MAPE — Mean Absolute Percentage Error

- MAD — Mean Absolute Deviation

- RMSE — Root Mean Squared Error

The summary statistics indicate how well a forecast model estimates measure values during the supporting data time range, that is, *prior to* the forecast time range. The smaller the values of these statistics are, the more confident you can be of the ability of the forecast to predict the measure accurately during the forecast time range.

Tip: Use the summary statistics to compare different combinations of forecasting methods and parameters.

MAPE — Mean Absolute Percentage Error

Since MAPE is expressed as a percentage, it is flexible and easy to interpret. Furthermore, MAPE allows comparison across measures of different magnitudes. The other statistics (MAD and RMSE) reflect the magnitude of the measures from which they are derived, and cannot be directly compared across measures.

A lower MAPE value indicates a smaller percentage difference between the measure and its forecast. A value below 15 percent indicates that the forecast is reasonably accurate *during the supporting data time range*.

MAD — Mean Absolute Deviation

The value of MAD reflects the magnitude of the data on which it is based. For example, you could expect a forecast of sales in millions to yield a MAD value in the thousands. A lower MAD value indicates that, on average, there is less difference between a measure and its forecast.

RMSE — Root Mean Squared Error

Like MAD, the value of the RMSE reflects the magnitude of the data on which it is based. Since the differences between the measure and its forecast are squared, this statistic is more sensitive than the others to anomalous values in your data.

When a measure's data is relatively stable, the value of RMSE will be similar to that of MAD. A RMSE value that is significantly larger than its corresponding MAD value indicates the presence of a few large, anomalous discrepancies between a measure and its forecast.

Related information

Search for the following topic in the Analyzer Help system:

"Forecast Summary Statistics"

Part III

Using the Analyzer Web Interface

This section describes how to use the Oracle Sales Analyzer Web interface.

This section contains the following chapters:

- Chapter 11, "The Analyzer Web Environment"
- Chapter 12, "Working with Reports and Graphs in the Web Environment"
- Chapter 14, "Working with Forecasts in the Web Environment"
- Chapter 15, "Using the Analysis Library"
- Chapter 16, "Working with Custom Objects in the Web Environment"
- Chapter 17, "Selecting Data in the Web Environment"
- Chapter 18, "Managing Objects in the Web Environment"

11

The Analyzer Web Environment

Chapter summary

This chapter describes how to access, navigate, and exit Oracle Sales Analyzer in the Web environment.

List of topics

This chapter includes the following topics:

- Accessing Analyzer through the Web Interface
- Analyzer Page
- Document Workspace
- Navigation List
- Online Help
- Exiting Analyzer

Accessing Analyzer through the Web Interface

Description: Analyzer Web interface

The Analyzer Web interface provides access to Analyzer features and functions through a browser.

Methods of access

Analyzer can be configured for direct access, or for access through Oracle Applications. Your DBA will tell you which method to use and provide the URL for the application.

Login tips

Following are some guidelines for logging in:

- Ensure that your browser accepts cookies.

  If you use Netscape as your browser, from the Edit menu choose **Edit**, **Preferences**, **Advanced** to check this settings. If you use Internet Explorer as your browser, from the Tools menu, choose **Internet Options**, **Security**, **Custom Level** to check this setting.

- If the system prompts you to download files to your machine for local storage, accept the files. This will enable the browser to load Web files only once.

- If you encounter errors, try clearing your browser's cache and restarting the browser.

- Bookmark your start page for easy access. Set the bookmark before you load a document into the workspace.

- Maximize your browser window. This ensures that the application will run at full size.

- Change settings for optimum screen resolution.

- If you will be using a language other than English, ensure that your browser is set to that language.

Note: Sessions have a maximum idle time that is set by the DBA. Your session will terminate automatically if it is idle for this time period.

Analyzer Page

Description: Analyzer page

The Analyzer page appears when you use the Web interface to log into Oracle Sales Analyzer. The Analyzer page is comprised of two frames: the navigation list in the left frame and the document workspace in the right frame.

Example: Analyzer page

The following illustration shows the Analyzer page. A report is open in the workspace.
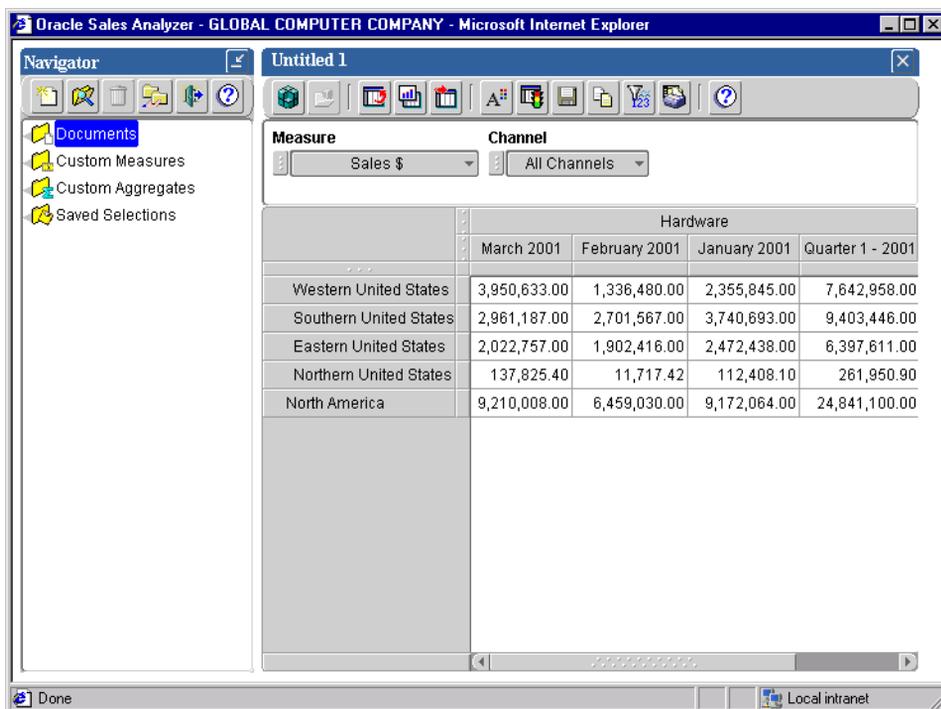
Navigation List

Description: Navigation list

The navigation list, located in the left frame of the Analyzer page, enables you to work with Analyzer *objects.* Objects include reports, graphs, forecasts, folders, custom measures, custom aggregates, and saved selections.

The navigation list displays personal objects that you have created and saved. It also displays system folders and public shared objects to which you have access.

Example: Navigation list

The following illustration shows how the Analyzer navigation list might appear. The Navigator toolbar is at the top; Analyzer objects populate the list.
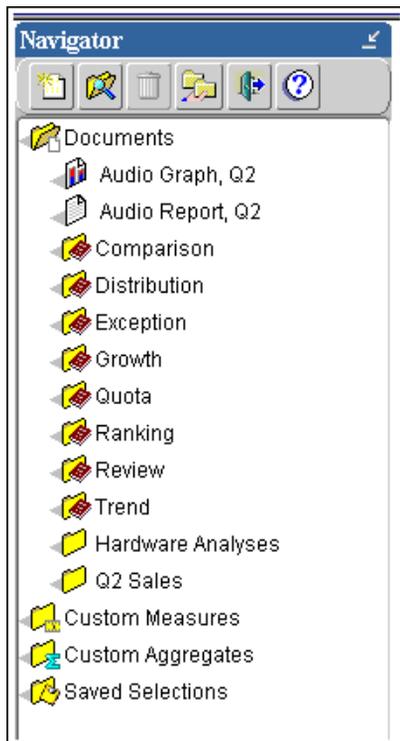
Navigation tools

The Navigator toolbar appears at the top of the navigation list. The toolbar buttons enable you to perform the following tasks.

Button	Name	Function
	New	Create a new object (report, graph, forecast, custom measure, custom aggregate, saved selection, or folder).
	Find	Search for an object by name. You can search for documents, custom measures, custom aggregates, or saved selections.
	Delete	Delete a selected personal object (report, graph, forecast, custom measure, custom aggregate, saved selection, or folder).
	Maintain Libraries	Publish a personal object to a public library in order to share it with other users. Also publish an object from a public library to your private library.
	Exit	Exit Analyzer.
	Help	Access Analyzer HTML Help.

Navigation list objects

The following table illustrates the objects that might appear in your navigation list. The table also lists the commands that are accessible when you right-click an object.

Object	Description	Right-click Commands
	Documents folder	New Report New Graph New Forecast Paste (if a document has been cut or copied) New Folder Find Documents
	Public (shared) documents folder	Find Documents Properties
	Personal (user-defined) documents folder	Rename Delete Paste Find Documents Properties
	Public (shared) report	Open Print Properties
	Personal (user-defined) report	Open Rename Delete Cut Copy Paste Print Properties
	Public (shared) graph	Open Print Properties

Object	Description	Right-click Commands
	Personal (user-defined) graph	Open Rename Delete Cut Copy Paste Print Properties
	Public (shared) forecast	Open Print Properties
	Personal (user-defined) forecast	Open Rename Delete Cut Copy Paste Print Properties
	Analysis Library folder	Find Documents Properties
	Analysis Library document	Open Print Properties
	Custom Measures folder	New Custom Measure Find Custom Measures
	Public custom measure	View Properties
	Personal (user-defined) custom measure	Edit Rename Delete Properties

Object	Description	Right-click Commands
	Custom Aggregates folder	New Custom Aggregate Find Custom Aggregates
	Custom Aggregates *dimension* folder	New Custom Aggregate Find Custom Aggregates
	Public custom aggregate	View Properties
	Personal (user-defined) custom aggregate	Edit Rename Delete Properties
	Saved Selections folder	New Saved Selection Find
	Saved selections *dimension* folder	New Saved Selection Find Saved Selections
	Public saved selection	View Properties
	Personal (user-defined) saved selection	Edit Rename Delete Properties

Document Workspace

Types of documents

When you open a document or create a new document, it is displayed in the document workspace. Analyzer enables you to work with four types of documents:

- Reports — Display data in tabular format. For information about reports in the Web environment, see Chapter 12.

- Graphs — Display data in graphical format. For information about graphs in the Web environment, see Chapter 12.

- Forecasts — Estimate the future value of a measure based on its historic values and display results in graphical format and tabular format. For information about forecasts in the Web environment, see Chapter 14.

- Analysis Library — "Packaged" documents that run predefined analyses along specific dimensions. For information about the Analysis Library, see Chapter 15.

Adjusting the document workspace

You can view a document at its default size, or you can enlarge the size of the document by minimizing the navigation list.

- To enlarge the document workspace, click the minimize button at the top of the navigation list.

The document expands horizontally. The navigation list is no longer visible.

- To restore the navigation list, click the restore button at the top of the navigation list.

The document resumes its default width. The navigation list is now visible.

Example: Expanded document workspace

The following example illustrates an Analyzer report in an expanded document workspace. Note how the navigation list is minimized. Contrast this with the default workspace shown in .

Online Help

Accessing help

Use the **Help** button, located on the Navigator toolbar to access the Analyzer HTML Help system.

When a document is open, you can also click the **Help** button on the Document toolbar to access help that is specific to the document type.

Displaying Help for a specific task

Each function includes a **Help** button. Click this button to view instructions for the task at hand.

Printing Help

You can use your browser's print function to print Help files.

Exiting Analyzer

Procedure: Exiting Analyzer

To exit Analyzer, click the **Close** button on the Navigator toolbar.

Alternatively, you can click the browser's close button (X), located in the upper right corner of the screen. This closes the application and the browser.

What happens when you exit Analyzer

Exiting Analyzer terminates the application. If you have modified an open document, the system will prompt you to save it.

12

Working with Reports and Graphs in the Web Environment

Chapter summary

This chapter describes how to use reports and graphs in the Oracle Sales Analyzer Web environment.

List of topics

This chapter includes the following topics:

- About Reports and Graphs
- Creating Reports and Graphs
- Selecting Data for Reports and Graphs
- Arranging and Viewing Data in Reports and Graphs
- Creating Exception and Ranking Reports
- Changing the Appearance of Reports and Graphs
- Printing Reports and Graphs
- Saving Reports and Graphs
- Copying Report Data
- Exporting Data from Reports and Graphs
- Working with Reports and Graphs in the Navigation List

About Reports and Graphs

Description: Reports

Reports display multi-dimensional data in tabular format. You can create reports and print and save the results. You can also view and modify reports that have been copied to a public library to which you have access.

Example: Report

The following example illustrates an Analyzer report in the Web environment.

Definition: Graphs

Graphs display multi-dimensional data in graphical format. You can use graphs to accomplish the following:

- Show trends and emphasize the degree or rate of change

- Quickly compare data associated with different dimension values

- Show part-to-whole relationships

- Show the relationship between two measures

You can create graphs and print and save the results. You can also view and modify graphs that have been copied to a public library to which you have access.

Types of graphs

The following list describes the types of graphs that are available.

Graph Type	Graph Subtypes	Description
Bar	Clustered Clustered Dual-Y Stacked	Compares data associated with different dimension values
Line	Absolute Absolute Dual-Y Stacked Stacked Dual-Y Percentage	Shows trends over time and emphasizes rates of change
Area	Absolute Stacked Percentage	Shows trends and emphasizes the degree of change
3D	None	Isometric presentation of an area stacked graph, representing the same type of data but from a different perspective
Single Pie	None	Shows part-to-whole relationships
Scatter	Dual-Y	Shows relationships between two measures

Example: Graph

The following illustration shows an Analyzer bar graph in the Web environment.
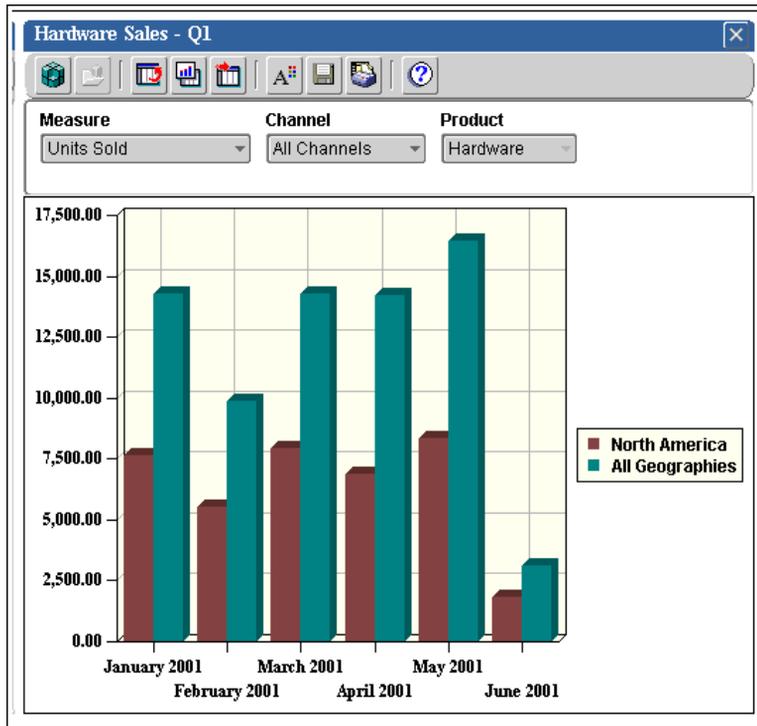
Opening a report or graph

Reports and graphs are displayed as objects in the navigation list, located in the left frame of your browser. Some reports and graphs might appear in individual folders, while others appear in the main Documents folder.

To open a report or graph, double-click its folder. Then double-click the document. Alternatively, you can right-click the document and choose **Open** from the popup menu.

Tip: To search for a report or graph, in the navigation list right-click the Documents folder or a specific folder, choose **Find Documents**, and enter a name or name fragment.

Using the Document toolbar to work with a report or graph

The Document toolbar appears at the top of an open report or graph. The toolbar buttons enable you to perform the following tasks.

Button	Name	Function
	Select Data	Select measures and dimension values for the document.
	Apply Saved Selection	Replace the current values for the dimension in the document with a predefined saved selection of values.
	Change Layout	Change the document layout by moving dimension positions.
	Change Document Type	Change the report to a graph or a graph to a report. For a graph, you can also choose the graph type.
	Export	Export data and labels from the document to a comma delimited (.csv), tab delimited (.txt), or Excel 2000+ (*.htm) file.
	Ranking/Exception Reports	For a report, display rows that meet exception, ranking, or exception and ranking criteria.
	Format Document	Specify document formatting.
	Color Coding	For a report, define color formats based on data conditions.

Button	Name	Function
	Save As	Save the document.
	Copy to Clipboard	For a report, copy selected data from the document to the Windows clipboard.
	Print	Print the document.
	Help	Display Oracle Sales Analyzer HTML Help.

Closing a report or graph

To close a report or graph, click its close button, located in the upper right corner.

If you have modified the document, you will be prompted to specify whether you want to save it.

Creating Reports and Graphs

About creating reports and graphs

The data, layout, and formatting of a report or graph initially reflects the default document. You can customize the document so that it displays exactly the data that you want to work with. You can also select layout and format options.

Procedure: Creating a report or graph

To create a report or graph, on the Navigation toolbar click the **New** button,

and choose **New Report** or **New Graph**.

Alternatively, you can right-click **Documents** in the navigation list and choose **New Report** or **New Graph** from the popup menu.

Result: A default report or graph appears. A generic name, such as "Untitled 1," appears on the document's title bar.

Selecting Data for Reports and Graphs

What data elements can you select?

You specify the slice of data that you want to include in a document. In the context of a report or graph, you define a data slice by selecting one or more measures and a set of dimension values.

Measure selections

A *measure* represents a data variable which is a placeholder for storing data values for all levels of all dimensions. For example, Sales and Costs might be measures in your database.

You can select any measure that appears in the measure selection list, including custom measures.

Dimension value selections

A *dimension* is a database object that organizes and indexes the data, similar to a key in a relational database. For example, if you have data with values for various time periods, then the data has a Time dimension; that is, it is organized by time. Dimension values are the elements that make up a dimension. For example, a Time dimension might include values for Years, Quarters, Months, and Weeks.

You can select any dimension values that appear in the selection list for a dimension, including custom aggregates.

Data selection tools and techniques

You use the **Select Data** button on the Document toolbar to select data values for an open report or graph.

The **Select Data** button opens the Select Data dialog box, where you choose a dimension and access tools that enable you to select data values from a list, choose values that meet specific criteria, and sort your selections.

For information about data selection tools and techniques, see Chapter 17.

Applying custom objects to reports and graphs

In addition to using a selection list or selection tools to select data values, you can change the data that is displayed in a report or graph by applying saved selections, custom aggregates, and custom measures. For more information, see the following topics:

- "Applying Custom Measures to Reports and Graphs" on page 16-7
- "Applying Custom Aggregates to Reports and Graphs" on page 16-13
- "Applying Saved Selections to Reports and Graphs" on page 16-21

Arranging and Viewing Data in Reports and Graphs

Changing the document layout

You can rearrange the dimensions on the page of a report or graph to view your data in a different way. You can use the **Change Layout** button on the Document toolbar. For a report, you can also change the layout by dragging and dropping row, column, and page selectors.

Using the Change Layout button to change the layout of a report or graph

With the report or graph open in the workspace, click the **Change Layout** button on the Document toolbar.

This opens the Change Layout dialog box, where you can change the position of one or more dimensions as follows:

- In a report, you can exchange one dimension with another, position a dimension before or after another dimension, or move a dimension to the row, column, or page edge.

- In a graph, you can rotate a specific dimension, the page edge, the group (which corresponds to the X-axis), or the series (which corresponds to the legend).

Using drag and drop to change the layout of a report

Use the row, column, and page selectors to drag and drop dimensions to different positions in a report. These selectors are located beside the row, column, and page labels and appear similar to a stoplight, as shown following.

If you drag a row, column, or page selector and drop it on another, or drag it to a new location, the dimension moves with the selector. For example, suppose a report has Geography in the row position and Product in the column position. You can drag and drop the row onto the column selector to move Geography to the column position and Product to the row position.

Here are some tips for dragging and dropping dimensions:

- If you drag a dimension near another dimension and the dimension turns grey, this indicates that the two dimensions will exchange (swap) positions.

- If you drag a dimension and a black bar appears, this indicates that the dimension will be placed at the bar's current position.

Drilling through levels of data in a report or graph

If a document includes hierarchical dimension values and the drilling option is turned on, you can view data at various levels by drilling within aggregate values. For example, if the document displays a geography that includes lower level values, you can "drill down" and expand the display to show component geographies. You can then "drill up" to re-aggregate the display.

In a report, you can drill a dimension value that is in the row or column position if a drill icon appears to the left of the dimension value name. The icon shape changes, depending on whether you can expand or collapse the value.

In a graph, you can drill a dimension value that is on the X or Y axis if a plus (+) or minus (-) symbol and the words "Drill down (or up) from *dimension value name*" appears when you move the cursor over the value.

Note: A report format option enables you to turn drilling on or off for a report. For more information, see "Procedure: Specifying general display elements for a report" on page 13-3.

Changing the document type

You can change a report to a graph, or a graph to a report. You can also change the type of graph.

Procedure: Changing a report to a graph or a graph to a report

With the document open in the workspace, click the **Change Document Type** button on the Document toolbar.

This opens the Change Document dialog box, where you can select an alternate format.

Procedure: Changing the type of graph

With the graph open in the workspace, click the **Change Document Type** button on the Document toolbar.

This opens the Change Document dialog box, where you can select an alternate graph type. For information about graph types, see .

Paging through a report or graph

Report or graph data is displayed one page at a time. You can use the page control to display a page other than the one that is currently in view. For example, the current page might show data for Total Product, but you can select another value from the list to see its data.

Adjusting columns and rows in a report

You can change the size of columns and rows in a report so that the information is easier to read. You can use drag and drop to adjust column and row sizes. You can also use a format option. For more information about adjusting rows and columns, see .

Creating Exception and Ranking Reports

About Exception and Ranking reports

Using an existing report as a starting point, you can create a report that meets exception criteria, ranking criteria, or both exception and ranking criteria.

- **Exception report** — Displays data that meets criteria that you specify.

- **Ranking report** — Presents data in descending order based on criteria that you specify.

- **Exception then Ranking report** — Displays data that meets criteria that you specify, presented in descending order based on criteria that you specify.

Example: Ranking/Exception report

The following illustration shows an example of a ranking report, one type of Ranking/Exception report.

Planning your Ranking/Exception report

Identify the row dimension

Before you create a Ranking/Exception report, identify the dimension in which you want to rank members or specify exception criteria. This is the focus of the report and the dimension that you will select as the row dimension (also known as the

down dimension) for the report. For example, if you intend to rank geographies by units sold for a product within a specified time period, you would specify Geography as the row dimension.

Identify the measure and the qualifying dimension values

Also identify the measure that you want to use as the basis for evaluating the dimension values in the row position and set this as the measure in the base report. For example, if you intend to use Geography as the row dimension, do you want to evaluate the geographies in terms of Sales $, by Units, or by another measure? You should also identify the qualifying dimension values that you intend to apply to the measure. To continue with the previous example: for what time period and product do you want to look at the measure?

By default, Analyzer will attempt to use the first measure that is displayed in the base report as the measure for exception and ranking. You can change this selection, but before you do so, ensure that the report includes the measure that you intend to choose. This will prevent a situation in which you create a report that is correct but not relevant: for example, a report that ranks geographies by Sales, but displays data for Costs.

Working with Ranking/Exception reports

You can work with a Ranking/Exception report, just as you would any Analyzer document, with several exceptions:

- The row dimension determines the report's focus. Therefore, you cannot use drag and drop or the Change Layout tool to place an alternate dimension in the row position while the ranking/exception criteria is applied. If you want to focus the report on a different dimension, you can create a new Ranking/Exception report. Alternatively, you can remove all ranking/exception criteria from the report, change the report layout, and then reapply the criteria.

- Although you can use drag and drop or the Change Layout tool to change the column dimension, adding a dimension to the column position, or removing a dimension from the column position can change the values that are displayed.

- If you change a Ranking/Exception report to a graph, the ranking/exception settings will be removed.

- As you change the pages of a Ranking report, the order of the rows will change as the ranking criteria is re-evaluated. For example, if Geography is in the page position and the first page of the report ranks Sales for a group of products in New York and another page ranks Sales for the same group of products in Boston, the products that are displayed on the pages may differ.

- If you attempt to modify a Ranking then Exception report that was saved in the client environment, you will be prompted to convert the document to an Exception then Ranking report.

Procedure: Creating a report that meets exception criteria

To create a report that meets exception criteria, follow these steps:

Note: The following procedure describes how to apply exception criteria to a report for the first time. If you are modifying previously defined criteria, see "Procedure: Modifying exception and ranking criteria for a report" on page 12-21.

1. With a report open in the workspace, click the **Ranking/Exception Reports** button on the Document toolbar.

2. If you see the Welcome dialog box, click **Next** to continue.

   Note: To suppress the Welcome dialog when creating other Ranking/Exception reports, click **Do not show this page in the future** before you continue.

   Result: The Row Dimension dialog box appears.

3. In the Row Dimension dialog box, choose the row dimension for the report and the member values that you want to evaluate for the dimension. Proceed as follows:

   a. In the Dimension box, select the row dimension. You can choose the default, or you can click the box and select an alternate dimension from the list.

      Note: The dimension that you choose will become the only row dimension in the report. Any other dimensions that are currently in the row position will move to the page position.

b. The Members box displays the number of values that are currently selected for the dimension that you chose in Step 3a. Click the *Ellipsis* button to access the Select Data dialog box, where you can view the current selections and choose alternate values.

c. Choose **Next** to continue.

Result: The Exception dialog box appears.

4. In the Exception dialog box, click **Yes** for the "Do you want to apply exception criteria to the *xyz* dimension" prompt, where *xyz* is the dimension that you chose in Step 3a. This enables you to choose the measure on which to base the exception, specify cutoff values, and select qualifying dimension values. Proceed as follows:

a. In the *measure* box, select the measure on which to base the exception condition. You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

b. In the *operator* box, choose the operator that specifies how the values for the measure that you selected in Step 4a must relate to a value.

The operators that you can choose depend on the type of measure (numeric or text). For example, if you select a numeric measure, you can choose **equal to**, **not equal to**, **greater than**, **less than**, **greater than or equal to**, **less than or equal to**, **between including**, **between excluding**, or **outside**.

c. In the *values* box, enter the value to which the values in the measure will be compared. If you chose the **between including**, **between excluding**, or **outside** operators, you must specify two values.

d. The *Dimensions* box displays default qualifying dimension values for the comparison. You can accept the default value that appears in the box for a dimension, or you can select an alternate value.

To select an alternate value for a dimension, highlight the value that you want to change and click the **Dimension Values** button. This opens a dialog box where you can select alternate values for that dimension.

e. Click **Finish** to display the exception report.

Example: Exception criteria

The following example shows the dialog box for defining exception criteria.
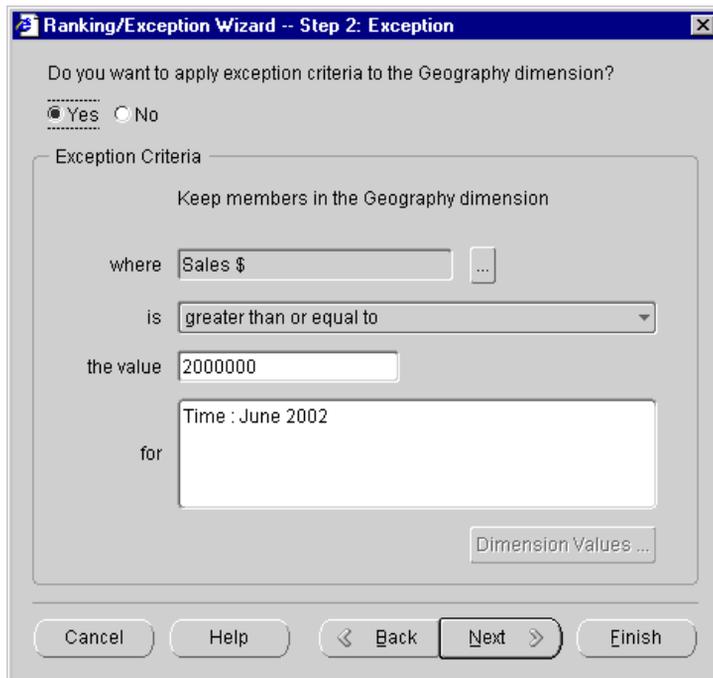
Procedure: Creating a report that meets ranking criteria

To create a report that meets ranking criteria, follow these steps:

Note: The following procedure describes how to apply ranking criteria to a report for the first time. If you are modifying previously defined criteria, see "Procedure: Modifying exception and ranking criteria for a report" on page 12-21.

1. With a report open in the workspace, click the **Ranking/Exception Reports** button on the Document toolbar.

2. If you see the Welcome dialog box, click **Next** to continue.

Note: To suppress the Welcome dialog when defining other Ranking/Exception reports, click **Do not show this page in the future** before you continue.

Result: The Ranking/Exception Wizard Row Dimension dialog box appears.

3. In the Ranking/Exception Wizard Row Dimension dialog box, choose the row dimension for the report and the member values that you want to evaluate. Proceed as follows:

    a. In the Dimension box, select the row dimension. You can choose the default, or you can click the box and select an alternate dimension from the list.

        Note: The dimension that you choose will become the only row dimension in the report. Any other dimensions that are currently in the row position will move to the page position.

    b. The Members box displays the number of values that are currently selected for the dimension that you chose in Step 3a. Click the *Ellipsis* button to access the Select Data dialog box, where you can view the current selections and choose alternate values.

    c. Choose **Next** to continue.

    Result: The Ranking/Exception Wizard Exception dialog box appears.

4. In the Ranking/Exception Wizard Exception dialog box, click **Next**.

Result: The Ranking dialog box appears.

5. In the Ranking dialog box, click **Yes** for the "Do you want to apply ranking criteria to the *xyz* dimension" prompt, where *xyz* is the dimension that you chose in Step 3a. This enables you to choose the measure on which to base the ranking, specify ranking criteria, and select qualifying dimension values. Proceed as follows:

    a. In the *measure* box, select the measure on which to base the ranking condition. You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

    b. To rank top values, in the *top* box, enter an integer that represents the number or percentage of top values to select. To indicate that the value that you entered is a percentage, choose **percent**.

    c. To rank bottom values, in the *bottom* box, enter the number or percentage of bottom values to select. To indicate that the value that you entered is a percentage, choose **percent**.

    d. The *Dimensions* box displays default qualifying dimension values. You can accept the default value that appears in the box for a dimension, or you can select an alternate value for any dimension.

       To select an alternate value for a dimension, highlight the value that you want to change and click the **Dimension Values** button. This opens a dialog box where you can select an alternate value for that dimension.

    e. Click **Finish** to display the ranking report.

Example: Ranking criteria

The following example shows the dialog box for defining ranking criteria.
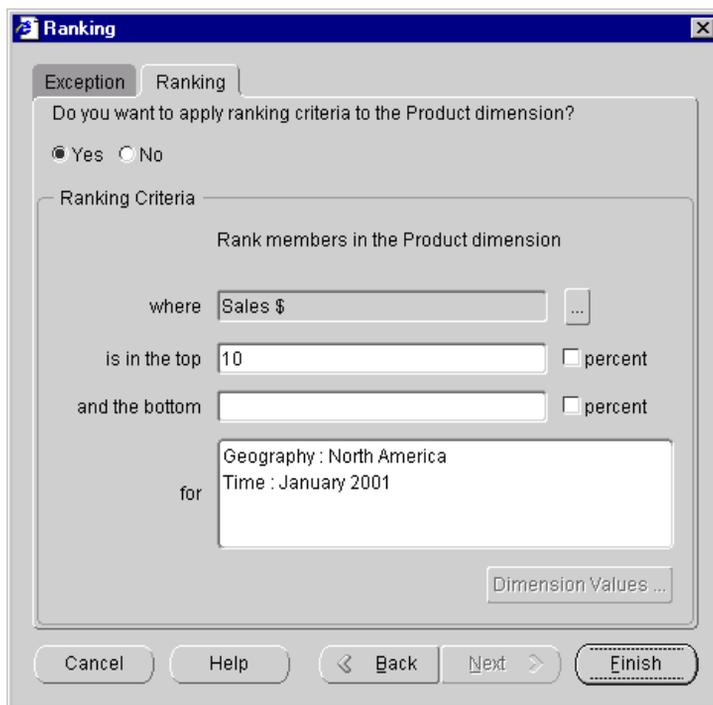
Procedure: Creating a report that meets exception and ranking criteria

To create a report that meets exception and ranking criteria, follow these steps:

Note: The following procedure describes how to apply exception and ranking criteria to a report for the first time. If you are modifying previously defined criteria, see .

1. With a report open in the workspace, click the **Ranking/Exception Reports** button on the Document toolbar.

   Result: The Ranking/Exception Wizard Welcome dialog box or the Ranking/Exception Wizard Row Dimension dialog box appears.

2. If you see the Ranking/Exception Wizard Welcome dialog box, click **Next** to continue.

   Note: To suppress the Welcome dialog when defining other Ranking/Exception reports, click **Do not show this page in the future** before you continue.

   Result: The Row Dimension dialog box appears.

3. In the Row Dimension dialog box, choose the row dimension for the report and the member values that you want to evaluate. Proceed as follows:

   a. In the Dimension box, select the row dimension. You can choose the default, or you can click the box and select an alternate dimension from the list.

      Note: The dimension that you choose will become the only row dimension in the report. Any other dimensions that are currently in the row position will move to the page position.

   b. The Members box displays the number of values that are currently selected for the dimension that you chose in Step 3a. Click the *Ellipsis* button to access the Select Data dialog box, where you can view the current selections and choose alternate values.

   c. Choose **Next** to continue.

   Result: The Exception dialog box appears.

4. In the Exception dialog box, click **Yes** for the "Do you want to apply exception criteria to the *xyz* dimension" prompt, where *xyz* is the dimension that you

selected in Step 3a. This will enable you to choose the measure on which to base the exception, specify cutoff values, and select qualifying dimension values. Proceed as follows:

a. In the *measure* box, select the measure on which to base the exception condition. You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

b. In the *operator* box, choose the operator that specifies how the values for the measure that you selected in Step 4a must relate to a value.

The operators that you can choose depend on the type of measure (numeric or text). For example, if you select a numeric measure, you can choose **equal to**, **not equal to**, **greater than**, **less than**, **greater than or equal to**, **less than or equal to**, **between including**, **between excluding**, or **outside**.

c. In the *values* box, enter the value to which the values in the measure will be compared. If you chose the **between including**, **between excluding**, or **outside** operators, you must specify two values.

d. The *Dimensions* box displays default qualifying dimension values for the comparison. You can accept the default value that appears in the box for a dimension, or you can select an alternate value.

To select an alternate value for a dimension, highlight the value that you want to change and click the **Dimension Values** button. This opens a dialog box where you can select alternate values for that dimension.

e. Click **Next** to continue.

Result: the Ranking dialog box appears.

5. In the Ranking dialog box, click **Yes** for the "Do you want to apply ranking criteria to the *xyz* dimension" prompt, where *xyz* is the dimension that you chose in Step 3a. This will enable you to select the measure on which to base the ranking, specify ranking criteria, and select qualifying dimension values. Proceed as follows:

a. In the *measure* box, select the measure on which to base the ranking condition. You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

b. To include top values in the ranking, in the *top* box, enter an integer that represents the number or percentage of top values to select. To indicate that the value that you entered is a percentage, choose **percent**.

c. To include bottom values in the ranking, in the *bottom* box, enter the number or percentage of bottom values to select. To indicate that the value that you entered is a percentage, choose **percent**.

d. The *Dimensions* box displays default qualifying dimension values. You can accept the default value that appears in the box for a dimension, or you can select an alternate value for any dimension.

To select an alternate value for a dimension, highlight the value that you want to change and click the **Dimension Values** button. This opens a dialog box where you can select an alternate value.

e. Click **Finish** to display the exception/ranking report.

Procedure: Modifying exception and ranking criteria for a report

To modify criteria for a Ranking/Exception report, follow these steps:

Note: The steps in this procedure limit your changes to criteria selections (measure, cut-off or ranking values, and qualifying dimension values). If you want to change the focus of the report — that is, place an alternate dimension in the row position, you must remove the exception/ranking settings and start again. Alternatively, you can create a new report.

1. With the report open in the workspace, click the **Ranking/Exception Reports** button on the Document toolbar.

Result: The Modify Ranking/Exception Settings dialog box appears.

2. Click **Modify Ranking/Exception Settings** and then click **OK**.

Result: The wizard starts. The Exception tab is active.

3. In the Exception tab, you can do one of the following:

- Modify the current exception criteria.

- Disable the current exception criteria. To do this, click **No** for the "Do you want to apply exception criteria to the *xyz* dimension" prompt, where *xyz* is the row dimension.

- Define exception criteria if none currently exists. To do this click **Yes** for the "Do you want to apply ranking criteria to the *xyz* dimension" prompt, where *xyz* is the row dimension. Then define the criteria as described in the topic "Procedure: Creating a report that meets exception criteria" on page 12-14.

  Note: If you do not want to define, disable, or modify exception criteria, proceed to Step 4.

4. To define, disable, or change ranking criteria, choose the **Ranking** tab or click **Next**. If you do not want to define, disable, or modify ranking criteria, proceed to Step 6.

5. In the Ranking tab, you can do one of the following:

   - Modify the current ranking criteria.

   - Disable the current ranking criteria. To do this, click **No** for the "Do you want to apply ranking criteria to the *xyz* dimension" prompt, where *xyz* is the dimension.

   - Define ranking criteria if none currently exists. To do this click **Yes** for the "Do you want to apply ranking criteria to the *xyz* dimension" prompt, where *xyz* is the row dimension. Then define the criteria as described in the topic "Procedure: Creating a report that meets ranking criteria" on page 12-16.

6. Choose **Finish** to display the report.

Procedure: Removing exception and ranking settings from a report

To remove exception and ranking settings from a report, follow these steps:

1. With the report open in the workspace, click the **Ranking/Exception Reports** button on the Document toolbar.

   Result: The Modify Ranking/Exception Settings dialog box appears.

2. Click **Remove Ranking/Exception Settings** and then click **OK**.

Changing the Appearance of Reports and Graphs

Format options for reports

You can format a report as follows:

- Format Document — You can select format options that apply to the entire report. For example, you can specify display options, fonts and background colors, automatic row and column sizing, and text elements such as title, subtitle, and footnote.

- Format Rows and Columns — You can select format options that apply to selected rows or columns of the report. For example, you can specify number formatting, borders, and fonts and colors.

- Color Coding — You can define special format conditions that apply when the data values for a measure meet criteria that you specify.

For information about report format options, see Chapter 13.

Format options for graphs

You can format a graph as follows:

- You can specify graph text elements such as title, subtitle, and footnote.

- You can specify the type of dimension labels to use and the properties for tick labels on the graph's X-axis.

- You can show or hide the graph legend and specify whether its orientation is horizontal or vertical.

For information about graph format options, see Chapter 13.

Printing Reports and Graphs

About printing reports and graphs

You can print an open report or graph and specify settings that determine how the printed page will look. When you save the document, Analyzer saves print settings for order, scaling, and page setup.

You can also print one or more reports, graphs, forecasts, and Analysis Library documents directly from the navigation list. For more information, see "Printing multiple documents" on page 12-33.

Procedure: Printing a report or graph

To print a report or graph, follow these steps:

1. With the document open in the workspace, click the **Print** button on the Document toolbar.

    Result: The Print dialog box for your browser appears.

2. You can change the print defaults for the browser. For example, you can specify new values for printer and number of copies.

3. Choose **OK** to continue.

    Result: The Print dialog box for Analyzer appears.

4. In the Print box, specify the pages that you want to print. You can choose one of the following options:

    ■ **Current Page of Data** — Prints the current page of data as indicated by the page label.

    ■ **All *n* Pages of Data** — Prints all pages of data, beginning at the first logical page, regardless of the current page settings.

    Note: If you choose to print all pages, the system prints *all* data for *all* dimension values that are in the page position in the document. Depending on the number of dimensions that are in status in the page position, printing all pages might result in many pages of output.

5. For a report, you can specify the order in which to print the pages. In the Order box, you can choose one of the following ordering options:

    ■ **Across then down** — Prints as many rows and columns as will fit on a physical page, then moves across the columns (until all are printed) and then down the rows (until all are printed).

- **Down then across** — Prints as many rows and columns as will fit on a physical page, then moves down the rows (until all are printed) and then across the columns (until all are printed).

6. In the Scaling box, you can specify how to scale the document.

   For a graph, you can choose one of the following options:

   - **Fit to Page** — Scales the graph to fit the width and height of the physical printed page. If you want to maintain the proportions that are presented on the screen, also select **Maintain Proportions**.

   - **Actual Size** — Prints the graph as it appears on the screen. Large graphs may be truncated.

   For a report, you can choose one of the following options:

   - **Adjust to** — Scales each logical page of the report by a percentage that you select. The output will span the number of physical pages that are necessary to meet the specified percentage.

   - **Fit to** — Scales each logical page to span the width and height of the number of pages that you select.

7. To indicate how you want the printed pages to look, choose **Page Setup**. This opens the Page Setup dialog box, where you can perform the following operations:

   - Specify optional header text (up to 100 characters) for the printed page.

   - Specify an optional footer for the printed page. You can include the date and page number.

   - For a report, specify whether row, column, and page labels will be repeated on each printed page.

   - For a report, specify whether a title, subtitle, and footnote will appear on the printed pages.

   - Specify margin settings for the printed pages.

8. If you want to preview the pages before printing them, choose **Preview**.

9. Click **OK** to print the document.

Saving Reports and Graphs

About saving reports and graphs

Saving a report or graph saves the view with the current measures and dimension value selections, formatting, and layout. Saving also preserves current specifications for ranking/exception, print scaling and page setup, as well as export option settings.

You have the following options when you save a report or graph:

- You can save the document. The saved report or graph appears as an object in the main Documents folder in the navigation list.

- You can save the document in a personal folder that you have previously created. The saved report or graph appears as an object in the navigation list in the specified folder. For information about creating folders, see "Using Folders" on page 18-2.

- You can save the document as the default. When you create a new document that is based on the default, it will have the dimension values, layout, and other characteristics of the default document.

Procedure: Saving a report or graph

To save a report or graph, follow these steps:

1. With the document open in the workspace, click the **Save As** button.

   The Save As dialog box appears. If you are saving a new document, a default name, such as "Untitled 1," appears in the Save Document As box. If you are saving modifications to an existing document, the document name appears in the Save Document As box.

2. Specify the name for the report or graph that you are saving, as follows:

   - If you are saving a new document, type a name (up to 70 characters) for it in the Save Document As box.

   - If you are saving an existing document under a new name, replace the name in the Save Document As box with the new name (up to 70 characters).

■ If you are saving a report or graph and want to give it the same name as an existing report or graph, click the Save As box and select the name from the list of saved documents.

■ If you are saving an existing document under its current name, do nothing with the information in the Save Document As box.

3. In the Into Folder box, select the folder into which you want to save the document.

Note: To save the document into the main Documents folder, select **(none)** in the Into Folder box.

4. If you want to save the document as your default document, so that its structure will appear whenever you create a new document, select the **Save As Default** option.

5. Choose **OK**.

Result: The Save As dialog box closes. The document that you saved is again visible in the workspace.

What happens when you save a report or graph?

A saved report or graph appears in the navigation list as a personal document. If you saved the document in a specific folder, it appears in that folder; if you did not specify a folder, the report or graph appears in the main Documents folder.

Saving modified public reports and graphs

You might have access to reports and graphs that have been created by other users and copied to a public library to which you have access. Such documents are referred to as *public* documents. If you modify a public report or graph and save the results, you are prompted to enter a new name. The document is saved in your personal database and is displayed as a personal object in the navigation list.

Copying Report Data

About copying report data

You can copy selected data from contiguous cells in an Analyzer report to the Windows clipboard. You can chose to copy data that has been stripped of special formats such as thousands separators, currency signs, and percent symbols, or you can specify that the copy include these elements. You can also copy row and column labels.

Procedure: Copying report data to the Windows clipboard

To copy data from an Analyzer report to the Windows clipboard, follow these steps:

1. With the report open in the workspace, select the cell or cells that you want to copy.

   You can select cells by using row and column selectors. You can also select cells by selecting a cell as a starting point, dragging the mouse pointer, and then releasing the mouse button at the end of the block.

   Note: You cannot select cells that are not contiguous.

2. Click the **Copy to Clipboard** button on the Document toolbar.

   Alternatively, you can click the right mouse button.

3. Choose a copy option:

   - **Copy** — Copies the data but excludes formats such as thousands separators, currency signs, and percent symbols.

   - **Copy Special** — Presents a submenu from which you can select one of the following:

     * **Copy Data with Labels** — Copies the data but excludes formats such as thousands separators, currency signs, and percent symbols. Also copies row and column labels associated with the selection.

     * **Copy Number Formatted Data** — Copies the data and includes formats such as thousands separators, currency signs, and percent symbols.

* **Copy Number Formatted Data with Labels** — Copies the data and includes formats such as thousands separators, currency signs, and percent symbols. Also copies the row and column labels associated with the selection.

* **Copy Row Labels** — Copies the row labels that are associated with the selected data. Does not copy the actual data.

* **Copy Column Labels** — Copies the column labels that are associated with the selected data. Does not copy the actual data.

4. If you see a dialog requesting additional privileges, choose **Grant**.

   Result: The data is copied to the Windows clipboard.

Exporting Data from Reports and Graphs

About exporting data from reports and graphs

You can export data from reports and graphs to files that can be used in Microsoft Excel and other applications. You can select one of three export format options (CSV, TXT, or HTM for Excel 2000+), and export data from all pages or from a specific page.

You can also select an option that will repeat the document's group labels in the export file and another option that will include the document's title, subtitle, and footnote. For a CSV or TXT file, you can specify whether to include number formatting in the export file. The Excel 2000+ HTM export file automatically includes number formatting.

Note: If the document contains many pages of data, you might have difficulty opening the exported file in certain applications. To avoid this situation, modify the data selections to reduce the number of values before exporting data.

Procedure: Exporting data from a report or graph

To export data from a report or graph, follow these steps:

1. With the report or graph open in the workspace, click the **Export** button on the Document toolbar.

   Result: The Export dialog box opens.

2. In the Export box, choose the pages to export: **Current** or **All *n* pages**.

3. In the As Type box, select the format for the export file:

   - **Comma delimited (*.csv)** — Exports the data in Comma Separated Value format, in which labels and data values are separated by commas.

   - **Tab delimited (*.txt)** — Exports the data in text file format, in which labels and data values are separated by tabs.

   - **Excel 2000+ (*.htm)** — Exports the data in a format that can be read by a browser and opened in Excel version 2000 and version 2002, also known as XP.

4. In the Options box, you can choose other properties for the export:

   - **Include Number Formatting** — For a CSV or TXT export file, check this option to export the data with the current setting for number formats. Do not check this option if you want to export unformatted numeric data. Note that an HTM export automatically includes number formats.

   - **Repeat Group Labels** — Check this option to repeat outer labels for columns and rows of inner, nested dimensions. Do not check this option if you want the export file to display labels as they appear in the Analyzer screen display.

     Include Title, Subtitle, Footnote — Check this option to include the title, subtitle, and footnote of the document in export. Do not check this option if you want to exclude these elements.

   - **Create One Sheet per Page** — For a multi-page HTM export, check this option to export the data from each logical page to a separate worksheet. Do not check this option if you want to export the data from all pages to a single worksheet. For more information, see "About Excel 2000+ output files" on page 12-32.

5. Choose **OK** to continue.

   Result: If you chose CSV or TXT format, the Save As dialog box opens. If you chose HTM format, the Export to HTML/Excel 2000+ dialog box opens.

6. Proceed as follows:

   a. In the Save in box, select the output directory for the file.

   b. In the File name box, enter a name for the file.

   c. Choose **OK** to export the file.

Example: Exporting data from a report or graph

The following example shows the Export dialog box. The user has selected Excel 2000+ (*.htm) as the export file type.
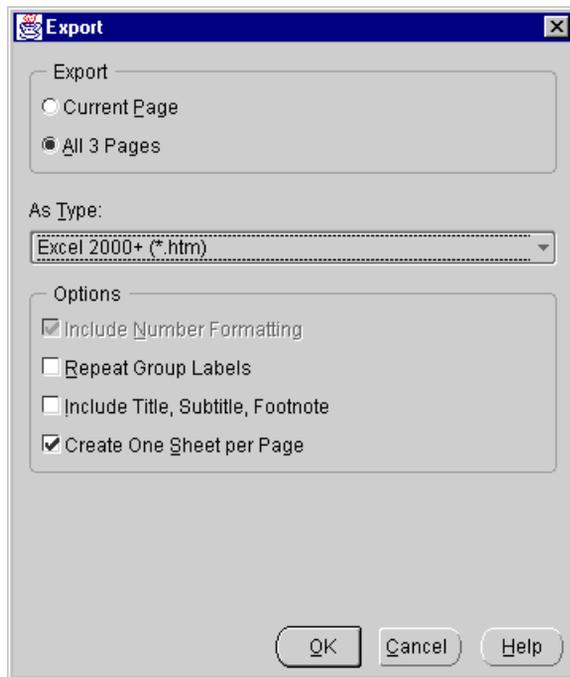
About Excel 2000+ output files

When you export to a single worksheet in Excel 2000+ (*.htm) format, Analyzer generates a single HTML file in the directory that you specify.

When you export to a multi-page file in Excel 2000+ format and specify that you want to create one sheet per page, Analyzer generates an HTML table of contents file plus a number of other files in the specified directory. Use the table of contents file to access the individual worksheets.

Working with Reports and Graphs in the Navigation List

Navigation list functions for reports and graphs

In the navigation list, you can open reports and graphs and create new reports and graphs. You can also work with reports and graphs as follows:

- Search for a report or graph
- Rename a personal report or graph
- Apply a saved selection, custom measure, or custom aggregate to an open report or graph.
- Print one or more reports and graphs
- View the object properties of a report or graph
- Delete one or more personal reports or graphs
- Publish a personal report or graph so that other users can access it

You can also copy a personal report or graph or change its position in the navigation list. For more information, see "Working with Personal Folders in the Navigation List" on page 18-7.

Procedure: Searching for a report or graph

To search for a report or graph, follow these steps:

1. Right-click the Documents folder or a specific folder in the navigation list and choose the **Find** option from the popup menu.

2. Enter a name or name fragment.

Procedure: Renaming a personal report or graph

To rename a personal report or graph, right-click the document in the navigation list and choose **Rename** from the popup menu. Then type the new name (up to 70 characters long).

Note: If the report or graph is in more than one folder, it will be renamed in all folders.

Applying custom objects to reports and graphs

When a report or graph is open in the workspace, you can use the navigation list to apply a previously saved selection, custom aggregate, or custom measure to the document. For more information, see the following topics:

- "Procedure: Applying a saved custom measure to an open report or graph" on page 16-7
- "Procedure: Applying a saved custom aggregate to an open report or graph" on page 16-14
- "Procedure: Applying a saved selection to an open report or graph" on page 16-21

Printing multiple documents

About printing multiple documents

You can print one or more saved reports, graphs, and other documents directly from the navigation list. Note that when you print multiple documents, you do not have the same options that are available when you use the **Print** tool on the Document toolbar to print an individual document. For example, when you print an individual document, you can specify the pages to print (all or current). When you print multiple documents, Analyzer prints all pages of the selected documents.

Procedure: Printing multiple documents

To print multiple documents from the navigation list, follow these steps:

1. In the navigation list, open the folders that contain the documents that you want to print.

2. Scroll to a document, press the CTRL key and simultaneously click the document object.

   Result: The document is highlighted.

3. Repeat Step 2 for each document that you want to print.

4. After you make your final selection, right-click and choose **Print** from the popup menu.

Procedure: Viewing report and graph properties

To view the object properties of a report or graph, right-click the document in the navigation list and choose **Properties** from the popup menu.

The following information is displayed:

- Name
- Created
- Modified
- Class
- Library (appears only if Class is PUBLIC)
- Applied Saved Selections

Procedure: Deleting a personal report or graph

To delete a personal report or graph, click the document in the navigation list and click the **Delete** button on the Navigator toolbar.

Alternatively, you can right-click the document and choose **Delete** from the popup menu.

In either case you will be prompted to confirm the deletion.

Note: If the document is in more than one folder, it will be deleted only from the specified folder.

Procedure: Deleting more than one personal report or graph

To delete more than one personal report, graph, or forecast, follow these steps:

1. In the navigation list, open the folders that contain the personal documents that you want to delete.

2. Scroll to a document, press the CTRL key and simultaneously click the document object.

   Result: The document is highlighted.

3. Repeat the previous step for each document that you want to delete.

4. After you make your final selection, right-click and choose **Delete** from the popup menu.

   Result: You will be prompted to confirm the deletion.

Publishing a personal report or graph

You can share a personal saved report or graph with other users by "publishing" the document to one or more public libraries to which you have read/write access. For more information, see "Using Publishing to Share Objects" on page 18-9.

13

Formatting Reports and Graphs in the Web Environment

Chapter summary

This chapter describes how you can format reports and graphs in the Oracle Sales Analyzer Web environment.

List of topics

This chapter includes the following topics:

- Formatting Reports
- Formatting Elements for an Entire Report
- Formatting Selected Rows and Columns in Reports
- Clearing Row and Column Formatting
- Formatting Reports Based on Data Conditions (Color Coding)
- Formatting Graphs

Formatting Reports

About formatting reports

When you open or create a report, the formatting reflects the document on which the report is based. You can make formatting changes and save the report. Your format selections will be saved with the document.

Types of report formatting

You can specify formatting for a report as follows:

- Format Document — You can select format options that apply to the *entire* report. For example, you can specify general display options, choose colors and fonts, select label types for dimension values, set the size of rows and columns, and specify a title, subtitle, and footnote.

- Format Rows and Columns — You can select format options that apply to selected rows and columns in the report. For example, you can apply fonts, colors, and borders to the data or labels in one or more columns and rows.

- Color Coding — You can create conditional format rules that will apply to a report when the data values for a measure meet specified criteria. This is referred to as *color coding*.

Formatting Elements for an Entire Report

What report elements can you format?

The following format options apply to the entire report:

- **General** — Specifies parameters for displaying indented levels, horizontal and vertical gridlines, and rows that contain NA and zero data. Also specify how to handle formatting conflicts and drilling.

- **Font** — Specifies fonts for data and labels; also specify color and alignment for data in the body of the report.

- **Autosizing** — Specifies sizing options for rows and columns.

- **Titles** — Specifies text, font, alignment, and color information for a report title, subtitle, and footnote.

- **Dimension Labels** — For each dimension, specifies the type of label that will be displayed.

Procedure: Specifying general display elements for a report

To specify general display elements for a report, follow these steps:

1. With the document open in the workspace, click the **Format Document** button on the Document toolbar.
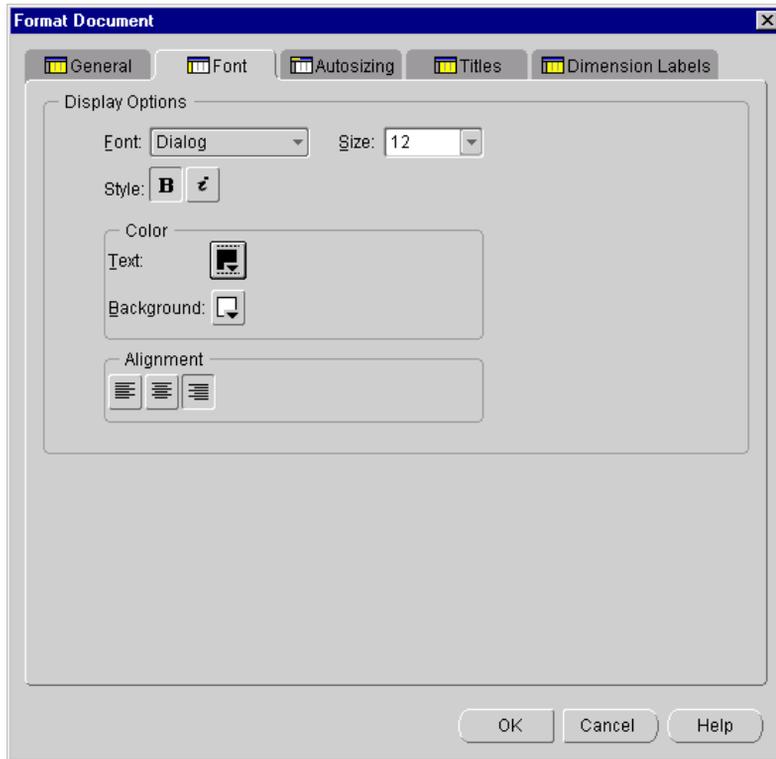

2. Choose **Format Document** from the popup menu.

   Result: The Format Document dialog box opens. The General tab is active.

3. The General tab displays the current settings for report display elements. You can change one or more of the following settings:

   - **View Rows** — Specify whether to show all rows or suppress rows with zero values, NA (unavailable) values, or both NA (unavailable) and zero values.

   - **Formatting Precedence (low to high)** — Specify the precedence order for formatting when row, column, and page conflicts occur. For example, if you use the Format Selected Rows and Columns option and choose purple as the text color for a row and then choose yellow as the text color for a column that intersects with the row, the setting for Formatting Precedence determines which color will display for the intersecting cell.

   - **NA Spell** — Enter a character or character string to represent NA data (up to 31 characters).

   - **Indent by Level** — For dimensions that have a hierarchical structure, specify whether to indent rows by level and enter the number of indent characters to use.

- **Horizontal Grid Lines** — Specify whether to show or hide horizontal grid lines.

- **Vertical Grid Lines** — Specify whether to show or hide vertical grid lines.

- **Enable Drilling** — For dimensions that have a hierarchical structure, specify whether you can drill down to lower levels.

4. Choose **OK** to apply your selections.

Example: Specifying general display elements for a report

The following illustration shows the Format Document dialog box for reports. The General tab is active.
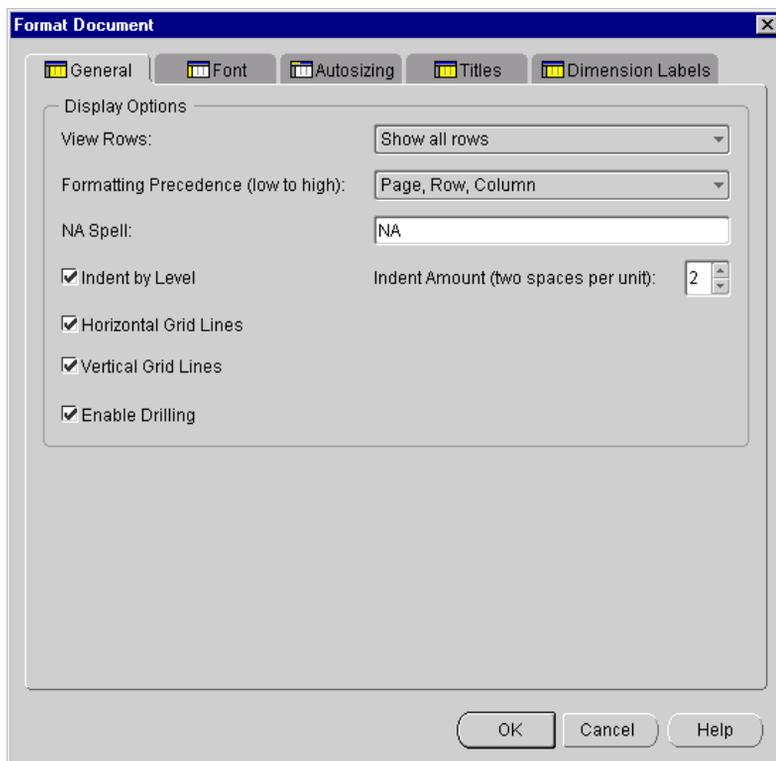
Procedure: Selecting fonts and colors for a report

To select fonts and colors for a report, follow these steps:

1. With the document open in the workspace, click the **Format Document** button on the Document toolbar.

2. Choose **Format Document** from the popup menu.

   Result: The Format Document dialog box appears. The General tab is active.

3. Select the **Font** tab.

4. The Font tab displays the current settings for font name, font size, color, and alignment. You can change one or more of these selections as follows:

   - Click the Font box to select the font name.

   - Click the Size box to select the font size.

   - In the Color box, select colors for the text and the cell background.

   - In the Alignment box, select an alignment option for data values.

5. Click **OK** to apply your selections.

   Note: Font settings will be applied to both the data *and* the labels in the report. Color and alignment settings will be applied only to the data.

Example: Selecting fonts and colors for a report

The following illustration shows the Format Document dialog box for reports. The Font tab is active.

Procedure: Setting the size for rows and columns in a report

To set the size for the rows and columns in a report, follow these steps:

1. With the document open in the workspace, click the **Format Document** tool on the Document toolbar.

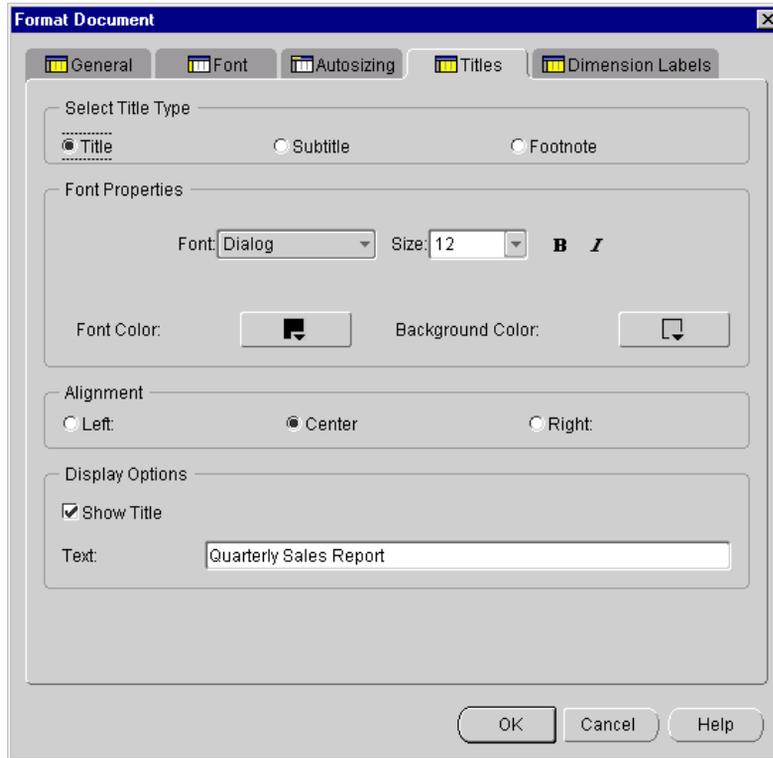2. Choose **Format Document** from the popup menu.

**Result:** The Format Document dialog box appears. The Font tab displays the current settings for font name, font size, color, and alignment.

3. Select the **Autosizing** tab.

4. The Row Sizing box displays the current setting for row size. You can choose one of the following options:

   ■ **Autosizing by Label** — Automatically sizes the rows based on the height and width of the row labels.

   ■ **Equal Sizing** — Sizes rows based on a height and width that you specify. The row height is determined by multiplying the font size of the label by the value that you enter.

   ■ **None** — Removes automatic or equal sizing from the rows.

5. The Column Sizing box displays the current setting for column size. You can choose one of the following options:

   ■ **Autosizing** — Automatically sizes the columns on the current page based on your selection. You can choose one of the following options:

   * **by Label** — Sizes the columns according to the size of the individual column labels.

   * **by Data** — Sizes the columns according to the size of the data each column contains.

   * **by Largest Data or Label** — Sizes the columns to the larger of either the individual column labels or the data contained in each column.

   ■ **Equal Widths by Average Character** — Sizes columns based on a width that you specify.

   ■ **None** — Removes automatic or equal sizing from the columns.

6. Choose **OK** to apply your selections.

Example: Setting the size for rows and columns in a report

The following illustration shows the Format Document dialog box for reports. The Autosizing tab is active.
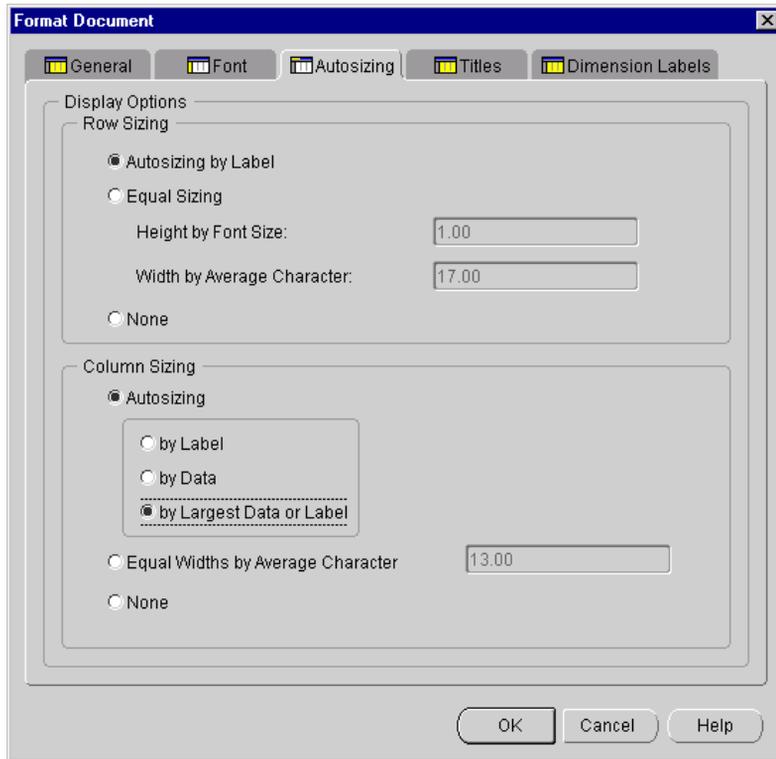
Alternative: Manually sizing rows and columns

You can use drag and drop to change the size of rows or columns in a report.

With the document open in the workspace, position the cursor on the border of the label of the row or column whose size you want to change. When the cursor changes to a double arrow, click and move the border.

Result: If the current setting for row or column sizing is an Autosize option or None, each instance of the dimension value in the selected row or column will change size while the other rows or columns will retain their current size. If the current setting for column or row sizing is Equal, all of the columns or rows will change size.

Reapplying row and column autosizing to a report

If an Autosize option has been selected for column or row sizing, you can automatically reapply autosizing when you view a new page of data or use drag and drop to change column or row sizing.

To reapply autosizing click the **Format Document** button on the Document toolbar.

Alternatively, you can right-click in the document.

Choose one of the following options from the popup menu:

■ **Reapply Autosizing** — Applies default autosizing to rows and columns. Does not override manual resizing (drag and drop).

■ **Reapply Autosizing to All** — Applies default autosizing to rows and columns. Overrides manual resizing (drag and drop).

Note: If Equal sizing or None has been selected for rows and columns, the options for reapplying autosizing will not appear when you right-click. If Autosizing has been selected for either column or row, the options to reapply autosizing will appear when you right-click, but will only apply to the dimension position (column or row) that has autosizing turned on.

Procedure: Specifying a title, subtitle, and footnote for a report

To specify a title, subtitle, or footnote for a report, follow these steps:

1. With the report open in the workspace, click the **Format Document** button on the Document toolbar.

2. Choose **Format Document** from the popup menu.

   **Result:** The Format Document dialog box appears. The General tab is active.

3. Select the **Titles** tab.

4. In the Select Title Type box, choose a text element (**Title**, **Subtitle**, or **Footnote**) and proceed as follows:

   a. In the Font Properties box, select font properties (name, size, style, color, background color) for the text.

   b. In the Alignment box, select horizontal and vertical alignment options for the text.

   c. In the Display Options box, choose **Show** to display the text element in the current document.

   d. In the Text box, enter the text for the title, subtitle, or footnote (498 characters maximum).

5. Repeat Step 3 for each text element that you want to include.

6. Choose **OK** to apply your selections.

Example: Specifying a title, subtitle, and footnote for a report

The following illustration shows the Format Document dialog box for reports. The Titles tab is active.

Procedure: Selecting dimension label types for a report

To select the type of dimension labels that you want to display in a report, follow these steps:

1. With the report open in the workspace, click the **Format Document** button on the Document toolbar.

2. Choose **Format Document** from the popup menu.

   Result: The Format Document dialog box appears. The General tab is active.

3. Select the **Dimension Labels** tab.

   Result: The tab shows the current selections for dimension labels.

4. To change the type of label for a dimension, click in the **Labels** column for the dimension and select one of the following options:

   - **Automatic** — The position of the dimension in the document determines the type of label that is displayed. If the dimension is on the row or page edge, the medium name is displayed; if the dimension is on the column edge, the short name is displayed.

   - **Long** — Displays the long name for the dimension.

   - **Short** — Displays the short name for the dimension.

   - **Medium** — Displays the medium name dimension.

5. Repeat the previous step for each dimension for which you want to set labels.

6. Choose **OK** to apply your selections.

Example: Selecting dimension label types for a report

The following illustration shows the Format Document dialog box for reports. The Dimension Labels tab is active.
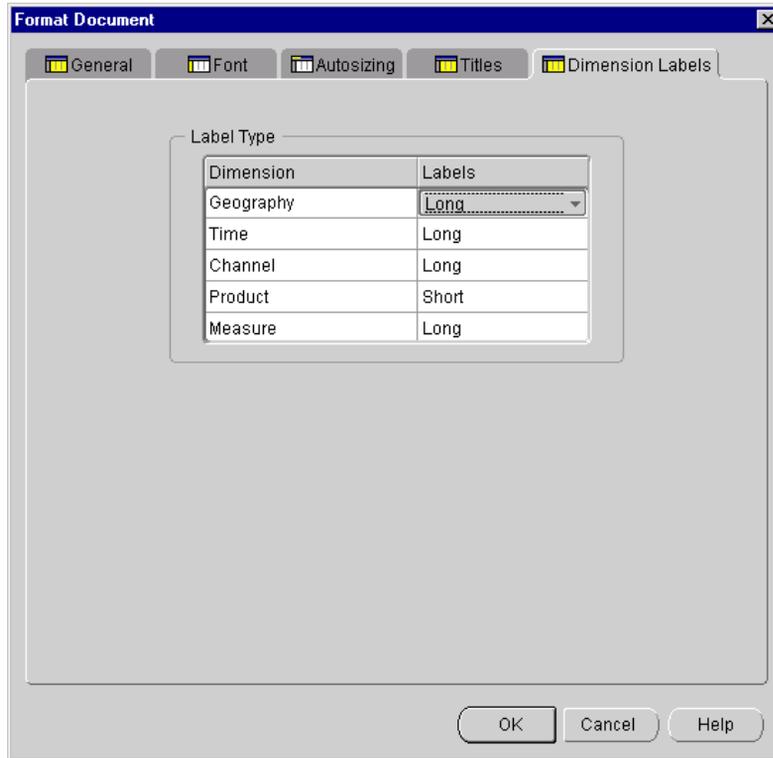
Formatting Selected Rows and Columns in Reports

About row and column format options

You can select one or more rows or columns in a report and specify formats for font, color, alignment, and borders. You can apply these formats to data in the rows and columns. You can also apply these formats to the row or column labels. For numeric values, you can specify display options for the selected rows or columns.

Formats that you apply to selected rows, columns, and labels take precedence over formats that apply to the entire report.

Note: If conflicts between row and column formatting occur, Analyzer uses the **Formatting Precedence** setting, described in the topic "Example: Specifying general display elements for a report" on page 13-4, to determine which format will prevail. For example, if you use the Format Selected Rows and Columns option and choose purple as the color for a row, and then choose and yellow as the color for a column that intersects with the row, the **Formatting Precedence** setting determines which color will display for the intersecting cell.

Procedure: Formatting data in selected rows or columns

To specify font, colors, alignment, and borders for data or labels in selected rows or columns, follow these steps:

1. With the report open in the workspace, select the rows, columns, or labels to which you want to apply formatting.

    ■   To select a column, click the highlighter under the column label. Use SHIFT+click or CTRL+click to select more than one column.

    ■   To select a row, click the highlighter next to the row label. Use SHIFT+click or CTRL+click to select more than one row.

    ■   To select a row or column label, click the label. Use SHIFT+click or CTRL+click to select more than one label.

    ■   To select all labels for a row or column, click the row or column selector. The column selector is located to the left of the first column label. The row selector is located at the top of the row labels.

2. Click the **Format Document** button on the Document toolbar.

3. Choose **Format Rows and Columns** from the popup menu.

    Result: The Format Rows and Columns dialog box appears. The Fonts and Borders tab is active.

4. The tab displays the current settings for font name, font size, font style, colors, alignment, and borders. You can change one or more of these selections as follows:

    ■   Click the Font box to select the font name.

    ■   Click the Size box to select the font size.

- In the Color box, select colors for text, border, and background.

- In the Alignment box, select alignment options for the text.

- In the Borders box, choose styles for top, left, bottom, and right borders. For a single solid border, choose the width.

5. Click **OK** to apply your selections.

Example: Formatting data in selected rows or columns

The following example shows the Format Rows and Columns dialog box. The Fonts and Borders tab is active.
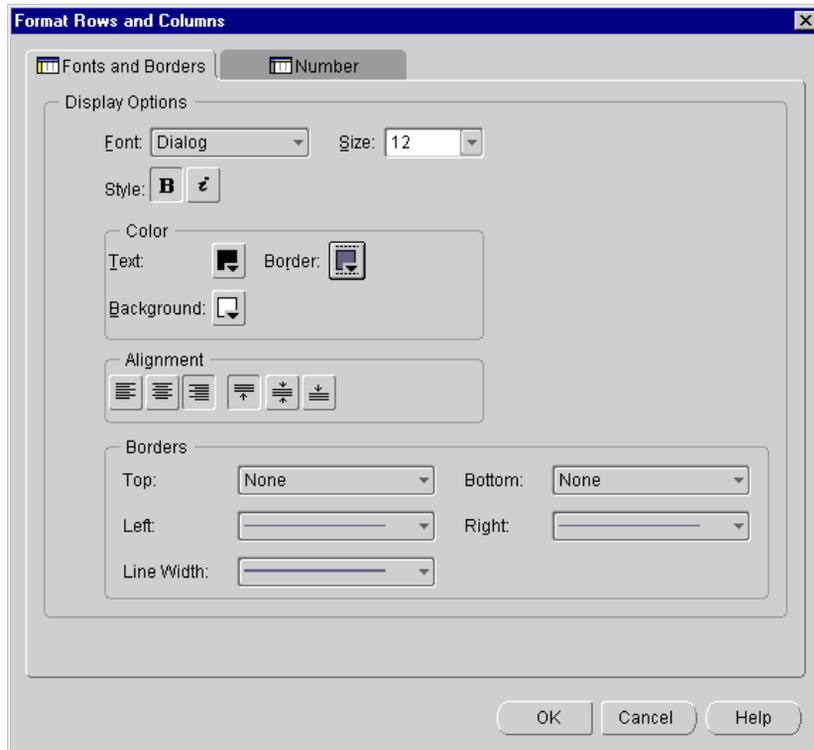
Procedure: Formatting numeric values in selected rows or columns

To format numeric values in selected rows or columns, follow these steps:

1. With the report open in the workspace, select the rows or columns in which you want to format numbers.

   - To select a column, click the highlighter under the column label. Use SHIFT+click or CTRL+click to select more than one column.

   - To select a row, click the highlighter next to the row label. Use SHIFT+click or CTRL+click to select more than one row.

2. Click the **Format Document** button on the Document toolbar.

3. Choose **Format Rows and Columns** from the popup menu.

   Result: The Format Rows and Columns dialog box appears. The Fonts and Borders tab is active.

4. Select the **Number** tab.

5. The tab displays the current settings for numeric values. You can modify the following settings:

Option	Description
Decimal Digits	Number of decimal places
Positive Values	Format for positive numbers (Available if you do not choose the Currency/Percent option)
Negative Values	Format for negative numbers (Available if you do not choose the Currency/Percent option)
Scale Values Down By	Scaling for large numbers
Use Thousands Separator	Display the thousands separator
Display Leading Zero	Display leading zeros
Apply Currency/Percent	Activates currency/percent format options: ■ Symbol — Symbol for dollars, yen, pounds, francs, or percent ■ Positive Values — Format for positive values ■ Negative Values — Format for negative values

Result: As you make formatting choices in this dialog box, the Samples box displays the effect that your choices will have if you choose **OK** to apply them.

6. Click **OK** to apply your selections.

Example: Formatting numeric values in selected rows or columns

The following example shows the Format Rows and Columns dialog box. The Number tab is active.
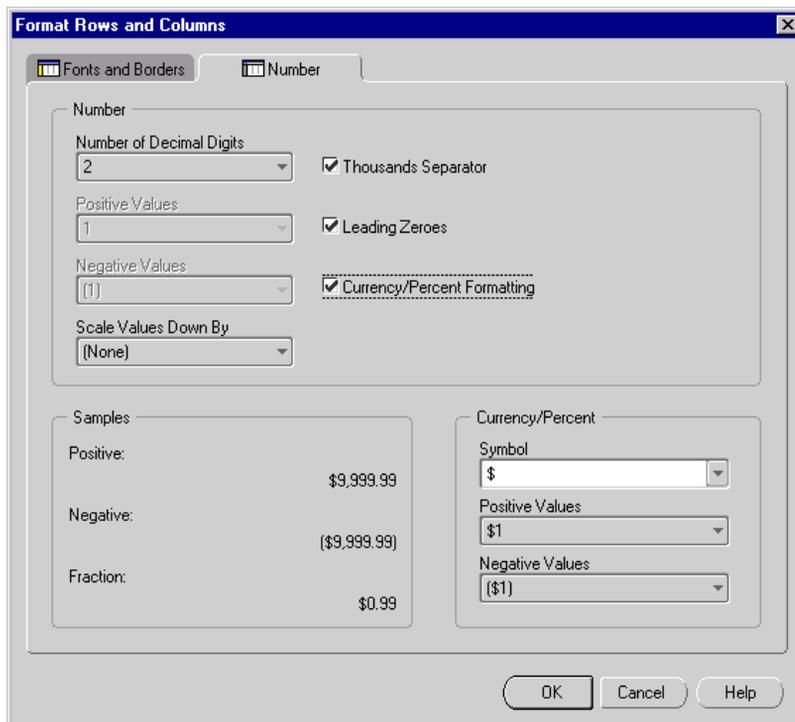
Clearing Row and Column Formatting

About clearing row and column formatting

You can clear row and column formats that have been applied through the **Format Rows and Column**s feature. You can clear all formats, or you can select specific rows and columns to clear.

Procedure: Clearing all row and column formats

To remove all formatting that has been applied to rows and columns, right-click in the report and choose **Clear All Row and Column Formatting** from the popup menu.

Alternatively, you can click the **Format Document** button on the Document toolbar.

and choose **Clear All Row and Column Formatting** from the popup menu.

Procedure: Clearing selected row and column formats

To remove formats from selected rows or columns, follow these steps:

1. With the report open in the workspace, select the rows or columns from which you want to clear formats.

   ■ To select a column, click the highlighter under the column label. Use SHIFT+click or CTRL+click to select more than one column.

   ■ To select a row, click the highlighter next to the row label. Use SHIFT+click or CTRL+click to select more than one row.

   ■ To select a row or column label, click the label. Use SHIFT+click or CTRL+click to select more than one label.

   ■ To select all labels for a row or column, click the row or column selector. The column selector is located to the left of the first column label. The row selector is located at the top of the row labels.

2. Right-click in the report and choose **Clear Selected Row and Column Formatting** from the popup menu.

   Alternatively, you can click the **Format Document** button on the Document toolbar.

and choose **Clear Selected Row and Column Formatting** from the popup menu.

Formatting Reports Based on Data Conditions (Color Coding)

About formatting reports based on data conditions

You can create conditional format rules that will apply to a report when the data values for a measure meet specified criteria. This is referred to as *color coding*.

Saving a report that includes color coding criteria saves the criteria. When you open the report, data that meets the conditions will be formatted as specified.

Note: Color coding specifications take precedence over other format specifications.

Color coding conditions

A color coding rule is composed of the following information:

- One or more conditions that the data must meet in order to be displayed with the selected formats.
- A set of formatting options that specifies how the data that meets the conditions will look.

Using color coding rules, you can implement conditions such as the following:

- When data values for a measure meet a specified value condition, the data will display in a specified format. For example, you might define a rule that applies bold text and a green background to cells in which the value for Sales is greater than or equal to 100,000.
- When data values for a measure relate to the values of another measure in a specified way, the data will display in a specified format. For example, you might define a rule that applies italic text and a red background to cells in which the value for Sales is 10% less than Sales a Year Ago.

You can also combine two conditions within a single rule and specify whether the data must meet one or both conditions. For example, you might define a rule that applies a green background to cells in which the value for Sales is greater than or equal to 100,000 *and* Sales is 10% greater than Sales Year Ago.

Color coding format options

You can specify the following formats when you define a color coding rule:

- **Stoplight color coding** — Stoplight color coding is a special type of color coding that highlights trends without showing values. When you apply stoplight color coding, data cells that meet the conditions appear as solid blocks of color. The actual value for a cell becomes visible only when you click it.

- **Font** — You can specify font name, font size, and indicate whether the font is regular, bold or italic. If you selected stoplight color coding, font options are not available.

- **Color** — You can specify the font color. If you selected stoplight color coding, font color options are not available.

- **Background color** — You can specify the background color for the cell. If you selected stoplight color coding, the label for this option is "Cell Color."

Using multiple conditions and rules

You can define one or more color coding rules for a report. You can define one or two conditions for each rule, and associate each measure in a report with a maximum of four rules. If the format associated with one rule conflicts with the format associated with another rule, the format associated with the most recently defined rule takes precedence.

Procedure: Defining a color coding rule

To define a color coding rule, follow these steps:

1. With the report open in the workspace, click the **Color Coding** button on the Document toolbar.

   Result: If this is the first color coding rule for this report, the Color Coding Wizard starts up. If the report has at least one color coding rule, the Color Coding dialog box appears, from which you can view the existing rules and choose **Add** to start the Color Coding Wizard.

2. In the Color Coding Wizard -- Specify Measure dialog box, select the measure to which the color coding rule will apply. Choose **Use Stoplight Color Coding** to apply stoplight color coding.

   For information about stoplight color coding, see "Color coding format options" on page 13-21.

3. Choose **Next** to continue.

4. In the Color Coding Wizard -- Specify Data Conditions dialog box, complete the Select by box as follows:

   ■ Choose **value** to compare the measure with a numeric value.

   ■ Choose **measure** to compare the measure with another measure.

   For more information, see "Color coding conditions" on page 13-20.

5. If you selected **value** in Step 4, proceed as follows:

   a. In the **where** box, select a measure on which to base the value condition. You can select the default measure, or you can select an alternate measure.

   b. In the **is** box, select an operator that specifies how the data values in the selected measure must compare to the value in the value box.

   c. In **the value** box, specify a number to which the data values in the measure will be compared.

6. If you selected **measure** in Step 4, proceed as follows:

   a. In the **where measure** box, select the first measure to use in the comparison. You can select the default measure, or you can select an alternate measure.

   b. In the **is** box, choose the operator that specifies how the data values in the first measure must compare to the data values in the second measure.

   c. In **the measure** box, specify the second measure to use in the comparison. You can select the default measure, or you can select an alternate measure.

   d. You can specify a percentage or numeric value to include in the condition. Select **percent** if the value is a percent.

7. When the condition definition is complete, do one of the following:

   ■ Choose **Next** to continue.

     or

   ■ To define a second data condition for the same rule, choose **Add a second data condition**. Then choose **Next**.

8. To add a second data condition, define the condition in the Color Coding Wizard -- Specify Additional Data Condition dialog box. Then choose one of the following options:

   ■ **Apply when both first and second condition are met**

     or

   ■ **Apply when either first or second condition is met**

   Choose **Next** to continue.

9. In the Color Coding Wizard -- Specify Appearance dialog box, specify the formats in which data that meets the condition or conditions will be displayed. You can specify font size, font style, font color, and background color.

   Note: If you selected **Stoplight Color Coding** in Step 2, you can only choose the cell background color.

10. Choose **Next** to continue.

11. In the Color Coding Wizard -- Specify Name dialog box, review the summary description of the data conditions. You can also enter a name for the rule.

   Tip: You might want to use a name that describes the condition or conditions.

12. Choose **Finish** to continue.

   Result: The Color Coding dialog box appears. It includes information regarding the appearance, description, and measure or measures for the rule.

13. Choose **OK** to apply the rule.

   Result: The report displays. If there are cells that meet a condition or conditions for a rule, the data in these cells is formatted as specified.

Example: Color coded report

The following illustration shows a color-coded report.

Example: Report with stoplight color coding

The following illustration shows a color-coded report with stoplight color coding.

Working with saved color coding rules

You can modify or delete a color coding rule that has been associated with a report. To do this, open the document and click the **Color Coding** button on the Document toolbar.

This opens the Color Coding dialog box, where you can select a rule and choose **Modify** or **Delete**.

Choosing **Modify** starts the Color Coding Wizard, which enables you to redefine data conditions or format selections.

Note: To turn stoplight color coding off or on, click the **Use Stoplight Color Coding** box before you choose **Modify**.

Formatting Graphs

About graph format options

When you open or create a graph, the formatting reflects the document on which the graph is based. You can make formatting changes and save the graph. Your format selections will be saved with the document.

You can format the following graph elements:

- Titles — Specify text, font, color, and alignment for a title, subtitle, and footnote

- Dimension Labels — For each dimension, select the type of label that will be displayed

- Tick Labels — Set the position and font for X-axis tick labels

- Legend — Indicate whether a legend will be displayed and specify text font, color, page position, and orientation

Procedure: Specifying a title, subtitle, and footnote for a graph

To specify a title, subtitle and footnote for a graph, follow these steps:

1. With the graph open in the workspace, click the **Format Document** button on the Document toolbar.

Result: The Format Document dialog box opens. The Titles tab is active.

2. In the Select Title Type box, choose a text element (**Title**, **Subtitle**, or **Footnote**) and proceed as follows:

   a. Select font properties (name, size, color, and style) for the text.

b. In the Display Options box, choose **Show** to display the text element in the current document.

c. In the Text box, type the text for the title, subtitle, or footnote (498 characters maximum).

3. Repeat the previous step for each text element that you want to include.

4. Choose **OK** to apply your selections.

Example: Specifying a title, subtitle, and footnote for a graph

The following illustration shows the Format Document dialog box for graphs. The Titles tab is active.
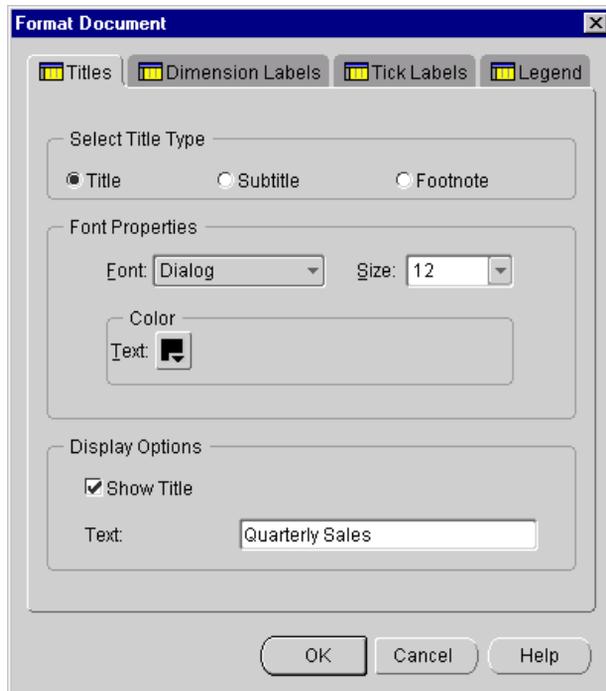
Procedure: Selecting dimension label types for a graph

To select the type of dimension labels to display in a graph, follow these steps:

1. With the graph open in the workspace, click the **Format Document** button on the Document toolbar.

   Result: The Format Document dialog box appears.

2. Select the **Dimension Labels** tab.

   Result: The tab shows the current selections for dimension labels.

3. To change the type of label for a dimension, click the **Labels** column for the dimension and select one of the following options:

   - **Automatic** —The position of the dimension in the document determines the type of label that is displayed. If the dimension is in the series edge or the page edge, the medium name is displayed; if the dimension is in the group edge, the short name is displayed.

   - **Long** — Displays the long name.

   - **Short** — Displays the short name.

   - **Medium** — Displays the medium name.

4. Repeat the previous step for each dimension for which you want to change the label.

5. Choose **OK** to apply your selections.

Example: Selecting dimension label types for a graph

The following illustration shows the Format Document dialog box for graphs. The Dimension Labels tab is active.
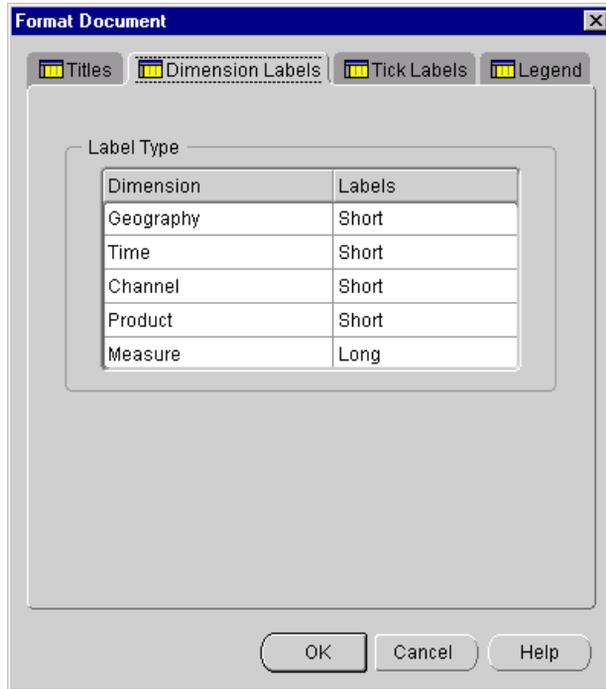
Procedure: Formatting tick labels for a graph

To format tick labels on the X-axis of a graph, follow these steps:

1. With the graph open in the workspace, click the **Format Document** button on the Document toolbar.

Result: The Format Document dialog box appears.

2. Select the **Tick Labels** tab.

3. The Font Properties box displays the current settings for font name, size, and color. You can change one or more of these selections as follows:

   ■ Click the Font box to select the font name.

   ■ Click the Size box to select the font size.

   ■ Click the Color box to select the color for the text.

4. To offset every other label for readability, choose **Staggered**.

5. If you want to skip some tick labels, select one of the following options in the Skip Mode box:

   ■ **Automatic** — Skips tick labels using an appropriate interval that is determined by the system based on the total number of labels.

   ■ **Manual** — Skips tick labels using interval settings that you provide in the Skip Amount box.

   If you do not want to skip any tick labels, choose **None**.

6. If you chose **Manual** in the previous step, in the Skip Amount box specify the number of tick labels that should be skipped.

7. Choose **OK** to apply your selections.

Example: Specifying tick labels for a graph

The following illustration shows the Format Document dialog box for graphs. The Tick Labels tab is active.
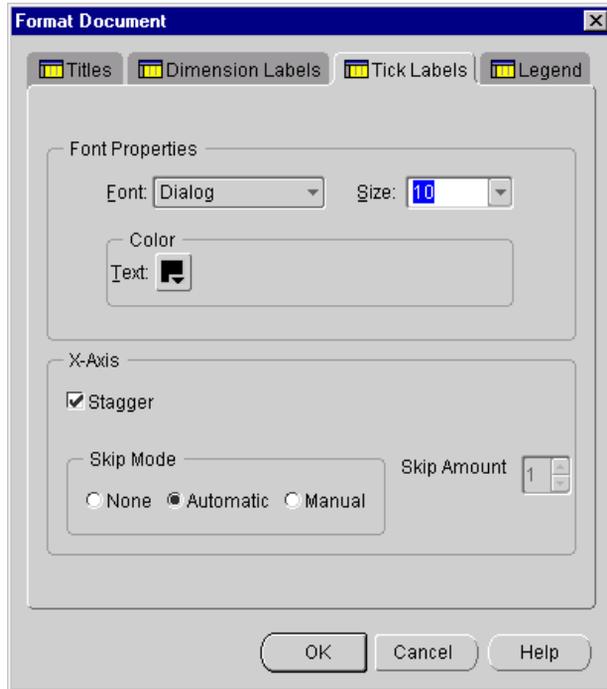
Procedure: Formatting the legend for a graph

To format the legend for a graph, follow these steps:

1. With the graph open in the workspace, click the **Format Document** button on the Document toolbar.

   Result: The Format Document dialog box appears.

2. Select the **Legend** tab.

3. Click **Show Legend** to display the legend in the current document.

4. The Font Properties box displays the current font settings for the legend. You can change one or more of these selections as follows:

   - Click the Font box to select the font.

   - Click the Size box to select the font size.

   - Click the Color box to select the color for the text.

5. The Legend Location box shows the current location of the legend. To change the location, click the desired position.

6. The Orientation box shows the current orientation of the legend. To change the orientation, choose **Vertical** or **Horizontal**.

7. Choose **OK** to apply your selections.

Example: Formatting the legend for a graph

The following illustration shows the Format Document dialog box for graphs. The Legend tab is active.
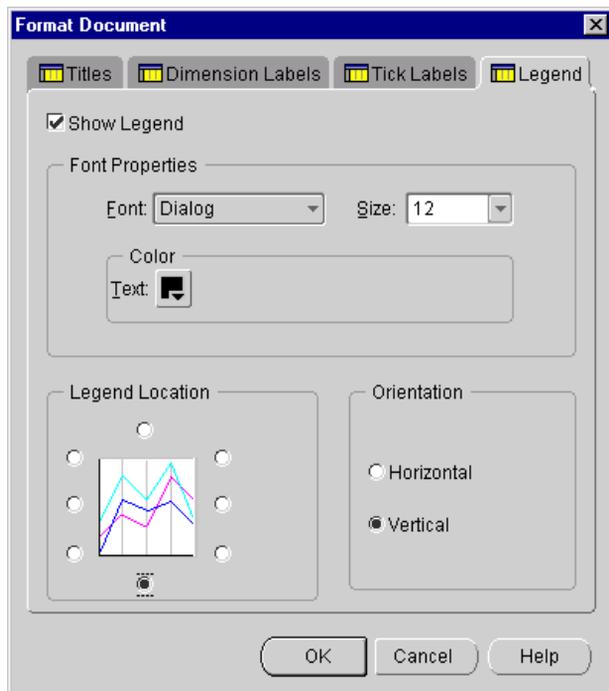
14

Working with Forecasts in the Web Environment

Chapter summary

This chapter describes how to work with forecasts in the Oracle Sales Analyzer Web environment.

List of topics

This chapter includes the following topics:

- About Forecasts
- Creating Forecasts
- Viewing Forecasts
- Modifying Forecasts
- Printing Forecasts
- Saving Forecasts
- Exporting Data from Forecasts
- Working with Forecasts in the Navigation List

About Forecasts

Definition: Forecast

A *forecast* is an estimate of a measure based on its historic values. Each forecast is based on the assumption that the future values of a *time series* (that is, a measure dimensioned by Time) can be derived from past values. Typically, forecasts are used to predict future, unknown measure values.

You can create forecasts and print, save, and export the results. You can also view and modify forecasts that have been copied to a public library to which you have access.

Forecast document

The forecast document includes a graph component, summary statistics, and a report component. For more information about forecast components, see "The Forecast Document" on page 10-12 and "Evaluating a Forecast" on page 10-14.

Example: Forecast

The following illustration shows a forecast in the Web environment.
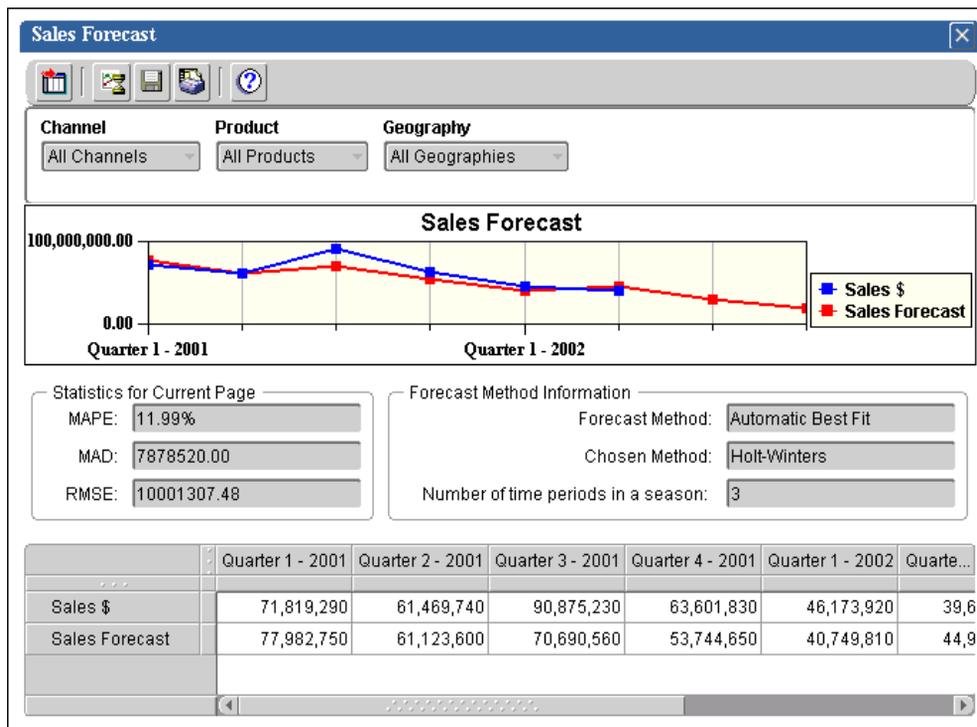
Opening a forecast

Forecasts are displayed as objects in the navigation list, located in the left frame of your browser. Some forecasts might appear within individual folders, while others appear in the main Documents folder.

To open a forecast, double-click its folder. Then double-click the document. Alternatively, you can right-click the forecast and choose **Open** from the popup menu.

Tip: To search for a forecast, right-click the main Documents folder or a specific folder, choose **Find Documents**, and enter a name or name fragment.

Using the Document toolbar to work with a forecast

The Document toolbar appears at the top of an open forecast. The toolbar buttons enable you to perform the following tasks.

Button	Name	Function
	Export	Export data and labels from the forecast to a comma delimited (.csv), tab delimited (.txt), or Excel 2000+ (*.htm) file.
	Modify Forecast	Change forecast parameters.
	Save As	Save the forecast.
	Print	Print the forecast.
	Help	Display Oracle Sales Analyzer HTML Help.

Closing a forecast

To close a forecast, click its close button, located in the upper right corner.

If you have modified the forecast, you will be prompted to specify whether you want to save the document.

Creating Forecasts

About creating forecasts

A Forecast Wizard guides you through the process of creating a forecast. You select a single measure, dimension values for each dimension of the measure, a time level, and the supporting and future time periods for the forecast.

Note: If you want to forecast data at various time levels, you must create a separate forecast for each level.

Requirement for creating a forecast: Future time periods

In order to create a forecast, your database must include the future time periods to be forecasted. If you encounter a problem selecting future time periods, contact your administrator.

Procedure: Creating a forecast

To create a forecast, follow these steps:

1. On the Navigator toolbar, click the **New** button,

and then choose **New Forecast**.

Alternatively, you can right-click **Documents** in the navigation list and choose **New Forecast** from the popup menu.

Result: The Forecast Wizard -- Introduction dialog box appears.

2. Choose **Next** to continue.

Result: The Forecast Wizard -- Step 1: Measure and Dimensions dialog box appears.

3. The Forecast Wizard -- Step 1: Measure and Dimensions dialog box displays defaults for forecast measure and dimension values. You can change the defaults as follows:

   a. Choose the *Ellipsis* button, located next to the Select a measure to forecast box. This opens a selection list, where you can choose an alternate measure.

   b. Specify how to display negative results:

      * To display negative results as negative numbers, enable the **Allow negative forecast numbers** box.

      * To display negative results as zeros, disable the **Allow negative forecast numbers** box.

   c. In the Choose base dimension values box, select a dimension and click the **Selector** button. This opens the Select Data dialog box, where you can make alternate value selections for the dimension. For information about selecting dimension values, see Chapter 17.

   d. Repeat Step 3c for each dimension for which you want to change selections.

4. Choose **Next** to continue.

   Result: The Forecast Wizard -- Step 2: Method dialog box appears.

5. The Forecast Wizard -- Step 2: Method dialog box displays **Automatic Best Fit** as the default forecast method. To select an alternate method, choose **Select a forecasting method**, select a method from the list, and enter values for parameters that are associated with the method.

   Note: For information about forecast methods, see "Choosing a Forecasting Method" on page 10-7. For information about forecast algorithms, see Appendix A.

6. Choose **Next** to continue.

   Result: The Forecast Wizard -- Step 3: Time Periods dialog box appears.

7. The Forecast Wizard -- Step 3: Time Periods dialog box displays defaults for Time level to forecast, Supporting time range, and Forecast time range. You can change the defaults as follows:

   a. In the Choose a Time level to forecast box, select a time level. The level selection will apply to the supporting time period and the forecast time period.

   b. In the beginning on and ending on boxes for Supporting Data time range, select a starting time and an ending time for supporting data. The

Supporting Data time range contains the data values on which the forecast calculations will be based.

Note: You must select the number of supporting time periods required by the method.

c. In the beginning on and ending on boxes for Forecast Time Range, select a starting time and an ending time for the forecast. The Forecast Time range, specifies the future time periods for which you are forecasting.

8. Choose **Next** to continue.

Result: The Forecast Wizard -- Step 4: Name and Comments dialog box appears.

9. Enter a short name (up to 16 characters) for the forecast. You can also change the default long name (up to 70 characters) and enter optional comments (up to 300 characters).

10. Choose **Finish** to create the forecast.

Viewing Forecasts

Viewing forecast sections

The graph is the part of the forecast that you see first. Scroll down to view the variance calculations, summary statistics, and tabular report. For more information about sections in a forecast, see "The Forecast Document" on page 10-12 and "Evaluating a Forecast" on page 10-14.

Paging through a forecast

Forecast data is displayed one page at a time. You can use the page controls at the top of the document to display a page other that the one currently in view. For example, the current page might show forecast data for Total Product, but you can select another value from the list to see its forecast.

Modifying Forecasts

About modifying forecasts

You can modify an open forecast by rerunning the Forecast Wizard. As the wizard leads you through the forecasting steps, you can make new selections for measure and dimension values, forecast method, time level, and time periods.

Procedure: Modifying a forecast

To modify a forecast, follow these steps:

1. With the forecast open in the workspace, click the **Modify Forecast** button on the Document toolbar.

    Result: The Forecast Wizard -- Step 1: Measure and Dimensions dialog box appears.

2. Use the wizard to review each forecast step and make the desired changes.

    Note: In order to save your changes, you must save the forecast.

Printing Forecasts

About printing forecasts

You can print the graphic portion of a forecast and specify the settings that determine how the printed pages will appear. When you save the forecast, Analyzer saves print settings for order, scaling, and page setup.

You can also print one or more forecasts, reports, and graphs directly from the navigation list. For more information, see "Printing multiple documents" on page 14-14.

Procedure: Printing a forecast

To print a forecast, follow these steps:

1. With the document open in the workspace, click the **Print** button on the Document toolbar.

   Result: The Print dialog box for your browser appears.

2. You can change the print defaults for the browser. For example, you can specify new values for printer and number of copies.

3. Choose **OK** to continue.

   Result: The Print dialog box for Analyzer appears.

4. In the Graph Size box, specify how to scale the graph. You can choose one of the following options:

   - **Fit to Page** — Scales the graph to fit the width and height of the physical printed page. If you want to maintain the proportions that are presented on the screen, also select **Maintain Proportions**.

   - **Actual Size** — Prints the graph as it appears on the screen. Large graphs may be truncated.

5. To indicate how you want the printed pages to look, choose **Page Setup**. This opens the Page Setup dialog box, where you can perform the following operations:

   - Specify optional header text (up to 100 characters) for the printed page.

   - Specify an optional footer for the printed page. You can include the date and page number.

   - Specify margin settings for the printed pages.

   When your selection are complete, choose **OK** to return to the Print dialog box for Analyzer.

6. If you want to preview the pages before printing them, choose **Preview**.

7. Click **OK** to print the forecast.

Saving Forecasts

Save options

Saving a forecast saves the forecast method, time periods, and measure selection. Saving also preserves specifications for print scaling and page setup, as well as export option settings.

You have the following options when you save a forecast:

- You can save the forecast document. The saved forecast appears in the main Documents folder in the navigation list.

- You can save the forecast document in a folder that you have previously created. The saved forecast appears in the specified folder in the navigation list.

Procedure: Saving a forecast

To save a forecast, follow these steps:

1. With the document open in the workspace, click the **Save As** button.

   The Save As dialog box appears. If you are saving a new document, the default name of the document, "Untitled Forecast" appears in the Save Document As box. If you are saving modifications to an existing document, the document name appears in the Save Document As box.

2. Specify the name for the forecast that you are saving, as follows:

   - If you are saving a new document, type a name (up to 70 characters) in the Save Document As box.

   - If you are saving an existing document under a new name, replace the name in the Save Document As box with a new name (up to 70 characters).

   - If you want to give the forecast the same name as an existing document, click the Save As box and select the name from the list.

   - If you are saving an existing document under its current name, do nothing with the information in the Save Document As box.

3. In the Into Folder box, select the folder into which you want to save the forecast.

   Note: If you want to save the forecast in the main Documents folder, select **(none)** in the Into Folder box.

4. Click **OK**.

   Result: The Save As dialog box closes. The forecast is again visible in the workspace.

What happens when you save a forecast?

A saved forecast appears in the navigation list as a personal document. If you saved the forecast in a folder, it appears in that folder; if you did not specify a folder, it appears in the main Documents folder.

A forecast is also saved as a measure variable, which appears in the selection list for the Measure dimension. You can use forecast measures in reports and graphs. You can also use a forecast measure to create a custom measure.

Saving modified public forecasts

You might have access to forecasts that have been created by other users and copied to a public library to which you have access. Such documents are referred to as *public* documents. If you modify a public forecast, you are prompted to save the document under a new name. The document is saved in your personal database and is displayed as a personal object in the navigation list.

Exporting Data from Forecasts

About exporting data from forecasts

You can export dimension labels and data values in an open forecast to a file that can be used in Microsoft Excel and other applications. You can select one of three export format options (CSV, TXT, or HTM for Excel 2000+).

You can also select an option that will repeat the document's group labels in the export file and another option that will include the document's title, subtitle, and footnote. For a CSV or TXT file, you can specify whether to include number formatting in the export file. The Excel 2000+ HTM export file automatically includes number formats.

Procedure: Exporting data from a forecast

To export data from a forecast, follow these steps:

1. With the forecast document open in the workspace, click the **Export** button on the Document toolbar.

    Result: The Export dialog box appears.

2. In the As Type box, select the format for the export file:

    ■ **Comma delimited (*.csv)** — Exports the data in Comma Separated Value format, in which labels and data values are separated by commas.

    ■ **Tab delimited (*.txt)** — Exports the data in text file format, in which labels and data values are separated by tabs.

    ■ **Excel 2000+ (*.htm**) — Exports the data in a format that can be read by a browser and opened in Excel version 2000 and version 2002, also known as XP.

3. In the Options box, you can choose other properties for the export file:

    ■ **Include Number Formatting** — For a CSV or TXT export file, choose this option to export the data with its current setting for number formats. Do not choose this option if you want to export unformatted numeric data. Note that an HTM export automatically includes number formats.

    ■ **Repeat Group Labels** — Choose this option to repeat outer labels for columns and rows of inner, nested dimensions. Do not choose this option if you want the export file to display labels as they appear in the Analyzer screen display.

Include Title, Subtitle, Footnote — Check this option if you want to include the title, subtitle, and footnote of the document as part of the export. Do not check this option if you do not want to include these elements.

4. Choose **OK** to continue.

   Result: If you chose CSV or TXT format, the Save As dialog box opens. If you chose HTM format, the Export to HTML/Excel 2000+ dialog box opens.

5. Proceed as follows:

   a. In the Save in box, select the output directory for the file.

   b. In the File name box, enter a name for the export file.

   c. Choose **OK** to export the file.

Working with Forecasts in the Navigation List

Navigation list functions for forecasts

Within the navigation list, you can open forecasts and create new forecasts. You can also work with forecasts as follows:

- Search for a forecast
- Rename a personal forecast
- View forecast properties
- Print one or more personal documents, including forecasts
- Delete one or more personal forecasts
- Publish a personal forecast so that other users can access it

You can also copy a personal forecast and change its position within the navigation list. For more information, see "Using Folders" on page 18-2.

Procedure: Searching for a forecast

To search for a forecast, follow these steps:

1. Right-click the Documents folder or a specific folder in the navigation list and choose the **Find** option from the popup menu.

2. Enter a name or name fragment.

Procedure: Renaming a personal forecast

To rename a personal forecast, right-click the forecast in the navigation list and choose **Rename** from the popup menu. Then type the new name.

Procedure: Viewing forecast properties

To view the object properties of a forecast, right-click the document in the navigation list and choose **Properties** from the popup menu.

The following information is displayed:

-   Name
-   Created
-   Modified
-   Class
-   Library (appears only if Class is PUBLIC)

Printing multiple documents

About printing multiple documents

You can print one or more saved forecasts and other documents directly from the navigation list. Note that when you print multiple documents, you do not have the same options that are available when you use the **Print** tool on the Document toolbar to print an individual document. For example, when you print an individual document, you can specify the pages to print (all or current). When you print multiple documents, Analyzer prints all pages of the selected documents.

Procedure: Printing multiple documents

To print multiple documents, follow these steps:

1. In the navigation list, open the folders that contain the documents that you want to print.

2. Scroll to a document, press the CTRL key and simultaneously click the document object.

   Result: The document is highlighted.

3. Repeat Step 2 for each document that you want to print.

4. After you make your final selection, right-click and choose **Print** from the popup menu.

Procedure: Deleting a personal forecast

To delete a personal forecast, click the document in the navigation list and then click the **Delete** button on the Navigator toolbar.

Alternatively, you can right-click the document and choose **Delete** from the popup menu.

In either case you will be prompted to confirm the deletion.

Note: If the document is in more than one folder, it will be deleted only from the specified folder.

Note: Deleting a personal forecast deletes forecast measure

Deleting a personal forecast document also deletes its corresponding forecast measure (that is, the measure that was created when you used the Forecast Wizard). This is the only way to delete a forecast measure.

Procedure: Deleting more than one personal document

Follow these steps to delete more than one personal forecast, report, or graph at the same time.

1. In the navigation list, open the folders that contain the documents that you want to delete.

2. Scroll to a document, press the CTRL key and simultaneously click the document object.

   Result: The document is highlighted.

3. Repeat the previous step for each document that you want to delete.

4. After you make your final selection, right-click and choose **Delete** from the popup menu.

   Result: You will be prompted to confirm the deletion.

Publishing a personal forecast

You can share a personal forecast with other users by "publishing" the document to one or more public libraries to which you have read/write access. For more information, see "Using Publishing to Share Objects" on page 18-9.

15

Using the Analysis Library

Chapter summary

This chapter describes how to use the Analysis Library, a feature of the Oracle Sales Analyzer Web environment.

List of topics

This chapter includes the following topics:

- About the Analysis Library
- Changing Data in Analysis Library Documents
- Viewing Data in Analysis Library Documents
- Printing Analysis Library Documents
- Copying Analysis Library Report Data
- Exporting Data from Analysis Library Documents
- Types of Analysis Library Documents

About the Analysis Library

Description: Analysis Library

The Analysis Library is a collection of documents that enable you to conduct predefined business analyses along a specific dimension. The Analysis Library is a feature of the Web environment; Analysis Library documents are not available from the Windows client.

The Analysis Library is an optional component of Sales Analyzer. Your administrator sets up the Analysis Library and selects the documents that will be available to you.

Comparison of Analysis Library documents to other reports and graphs

The following table compares Analysis Library documents to other Analyzer reports and graphs.

Analysis Library documents	Reports and graphs
The DBA determines which documents will be available. All users have access to the same set of documents.	Users can define their own documents. Users might have also access to documents that others have defined.
The focus of each document is predetermined, but users can change certain default settings.	Users determine the focus of each document.
Users cannot make layout changes or apply formatting.	Users can specify document layout and apply formatting.
Users can change most reports to graphs and graphs to reports.	Users can change reports to graphs and graphs to reports. Users can also select the graph type.
Users cannot save documents.	Users can save documents.

Example: Analysis Library document

The following illustration shows an Analysis Library document, Geography Ranking.

Opening an Analysis Library document

Analysis Library documents are grouped into folders, which appear in the navigation list. Depending on a setting specified by the DBA, these folders might appear either before or after personal and public folders.

In the following illustration, Analysis Library folders are displayed before the Key Products public folder and the Q12001 personal folder. Note how the icons for Analysis Library folders differ from the other folder icons.
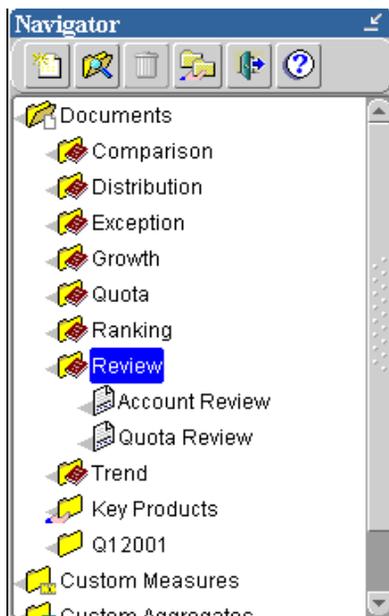
To open an Analysis Library document, double-click its folder. Then double-click the document. Alternatively, you can right-click the document and choose **Open** from the popup menu.

Tip: To search for an Analysis Library document, right-click the Documents folder or a specific Analysis Library folder, choose **Find Documents**, and enter a name or name fragment. The search is case insensitive and will be limited to the selected folder.

Using the Document Toolbar to work with Analysis Library documents

The Document toolbar appears at the top of an open Analysis Library document. The toolbar buttons enable you to perform the following tasks.

Button	Name	Function
	Export	Export data and labels from the document to a comma delimited (.csv), tab delimited (.txt), or Excel 2000+ (*.htm) file.
	Copy to Clipboard	For a report, copy selected data from the document to the Windows clipboard
	Print	Print the document
	Help	Displays Oracle Sales Analyzer HTML Help

Closing Analysis Library documents

To close an Analysis Library document, click its close button, located in the upper right corner.

Changing Data in Analysis Library Documents

Using the hypertext settings to change data values

The data that is displayed when you open an Analysis Library document is determined by the hypertext settings that appear at the bottom of the document. The settings are included in a full sentence that describes the analysis that will be performed. You can change settings that appear in colored, underlined hypertext.

Example: Hypertext settings

The following illustration shows settings for an Analysis Library document. You can change the value for each underlined element.
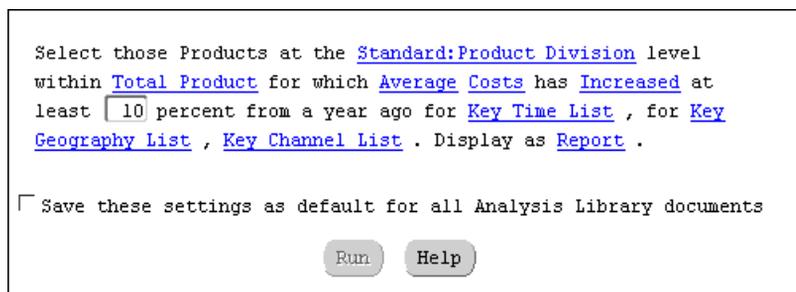
About modifying data

You can modify data in two ways:

- You can modify the data for the current document — You change one or more hypertext settings and run the document. Your changes persist only while the document is open in the workspace. The next time that you open the document, the settings revert to their default values.

- You can permanently modify the data and save your changes — You change one or more hypertext settings and then *save* them. When you alter settings in this way, the values that you choose replace the previous default selections, and the new defaults are used from then on in *every* Analysis Library document in which the settings appear.

  Note: Review documents are an exception to this rule. The settings for display settings in a review document are unique to that document type.

Procedure: Modifying settings for the current document

To modify settings in the current Analysis Library document, follow these steps:

1. With the document open in the workspace, scroll to the bottom of the document.

   Result: The hypertext settings are visible.

2. To change a hypetext setting, click the text for the setting.

   Result: If the setting requires a selection, the Single Value Selector dialog box or a popup menu appears.

3. To select a single value, choose it in the Single Value Selector dialog box.

4. To select multiple values, do one of the following:

   - To select a custom set of dimension values, from the popup menu choose **Custom Selection**. This opens the Select Data dialog box, where you can select values from a list, choose values that meet specific criteria, and sort your selections. For more information about selecting values, see Chapter 17.

   - To apply a previously saved selection of dimension values, from the popup menu, choose the saved selection. This option is only available if there is at least one saved selection for the dimension. For information about saved selections, see "About Saved Selections" on page 16-15.

   Note: To reapply the default settings, from the popup menu, choose **Key** *Dimension* **List**, where *Dimension* is the name of a dimension, such as Product.

5. To change a numeric value, click in the box and type a new value.

6. Repeat Step 2 and the other appropriate procedures for each setting that you want to change.

7. Choose **Run** to apply the new selections and redisplay the current document based on your changes.

Note: Your choices persist only while the document is open in the workspace. The next time that you run the document, the view reverts to the default settings.

Procedure: Permanently modifying settings

To permanently modify default settings for Analysis Library documents, follow these steps:

1. Change one or more settings as described in "Procedure: Modifying settings for the current document" on page 15-7.

2. Select the **Save these settings as default for all Analysis Library documents** option.

3. Choose **Run** to save the settings and redisplay the current document based on your changes.

Note: Your choices are saved as the default for the current document. They are also saved as the default for all other Analysis Library documents that include the same settings.

Viewing Data in Analysis Library Documents

Changing the type of view for an Analysis Library document

You can change the default report view to a graph for all documents except reviews, which are only available in a unique format. The view type setting persists only while the document is open in the workspace. The next time that you run the document, the type reverts to report.

To change an Analysis Library report view to a graph or a graph view to a report, follow these steps:

1. With the document open in the workspace, scroll to the bottom of the document.

    Result: The hypertext settings are visible.

2. Click the hypertext link that displays the current view type.

    Result: The setting toggles to the alternate view. For example, if you click **Report**, the setting toggles to **Graph**.

3. Choose **Run** to apply the setting and redisplay the current document based on the change.

Paging through data in an Analysis Library document

Data for an Analysis Library document is displayed one page at a time. You can use the page control at the top of the document to display a page other that the one currently in view. For example, the current page might show data for Total Product, but you can select another value from the list to see its data.

Product

- Total Product
- Audio Division
- Portable Audio

Your selection persists only while the document is open in the workspace. The next time that you run the document, the page reverts to the default page.

Drilling through levels of data in an Analysis Library document

You can view data at various levels by drilling within aggregate dimension values. For example, if the document displays a Geography dimension value that includes lower level values, you can "drill down" and expand the display to show component geographies. You can then "drill up" to re-aggregate the display.

In a report, you can drill in a dimension value that is in the row or column position if a drill icon appears to the left of the dimension value name. The icon shape changes, depending on whether you can expand or collapse the value. In a graph, you can drill in a dimension value that is on the X or Y axis if a plus (+) or minus (-) symbol and the words "Drill down (or up) from *dimension value name*" appears when you sweep the cursor over the value.

Your drill selections persist only while the document is open in the workspace. The next time that you run the document, the view reverts to the default view.

Adjusting columns and rows in an Analysis Library report

You can use "drag and drop" to change the size of rows and columns in an Analysis Library report.

With the report open in the workspace, position the cursor on the border of a row or column label. When the cursor changes to a double arrow, click and move the border.

Row and column sizing persists only while the document is open in the workspace. The next time that you run the document, the view reverts to the default.

Printing Analysis Library Documents

About printing Analysis Library documents

You can print a single Analysis Library document and specify settings that determine how the printed page will look. You can also include Analysis Library documents when you print more than one document.

Note: When you print a review, only the graph portion prints.

Procedure: Printing an Analysis Library document

To print an Analysis Library document, follow these steps:

1. With the document open in the workspace, click the **Print** button on the Document toolbar.

    Result: The Print dialog box for your browser appears.

2. You can change the print defaults for the browser. For example, you can specify new values for printer and number of copies.

3. Choose **OK** to continue.

    Result: The Print dialog box for Analyzer appears.

4. In the Print box, specify the pages that you want to print. You can choose one of the following options:

    ▪   **Current Page** — Prints the current page of data as indicated by the page label.

    ▪   **All *n* pages** — Prints all pages of data, beginning at the first logical page, regardless of the current page settings.

    Note: If you choose to print all pages, the system prints *all* data for *all* dimension values that are in the page position in the document. Depending on the number of dimensions that are in status in the page position, printing all pages might result in many pages of output.

5. For a report view, you can specify the order in which to print the pages. In the Order box, choose one of the following options:

    ▪   **Across then down** — Prints as many rows and columns as will fit on a physical page, then moves across the columns (until all are printed) and then down the rows (until all are printed).

    ▪   **Down then across** — Prints as many rows and columns as will fit on a physical page, then moves down the rows (until all are printed) and then across the columns (until all are printed).

6. In the Scaling box, you can specify how to scale the document.

    For a graph view, you can choose one of the following options:

    ▪   **Fit to Page** — Scales the graph to fit the width and height of the physical printed page. If you want to maintain the proportions that are presented on the screen, also select **Maintain Proportions**.

    ▪   **Actual Size** — Prints the graph as it appears on the screen. Large graphs may be truncated.

For a report view, you can choose one of the following options:

- **Adjust to** — Scales each logical page of the report by a percentage that you select. The output will span the number of physical pages that are necessary to meet the specified percentage.

- **Fit to** — Scales each logical page to span the width and height of the number of pages that you select.

7. To indicate how you want the printed pages to look, choose **Page Setup**. This opens the Page Setup dialog box, where you can perform the following operations:

- Specify optional header text (up to 100 characters) for the printed page

- Specify an optional footer for the printed page

- For a report, specify whether row, column, and page labels will be repeated on each printed page

- For a report, specify whether a title, subtitle, and footnote will appear on the printed pages

- Specify margin settings for the printed pages

When your selection are complete, choose **OK** to return to the Print dialog box for Analyzer.

8. If you want to preview the pages before printing them, choose **Preview**.

9. Click **OK** to print the document.

Printing multiple documents

About printing multiple documents
You can print one or more Analysis Library documents and other documents directly from the navigation list. Note that when you print multiple documents, you do not have the same options that are available when you use the **Print** tool on the Document toolbar to print an individual document. For example, when you print an individual document, you can specify the pages to print (all or current). When you print multiple documents, Analyzer prints all pages of the selected documents.

Procedure: Printing multiple documents

To print multiple documents from the navigation list, follow these steps:

1. In the navigation list, open the folders that contain the documents that you want to print.

2. Scroll to a document, press the CTRL key and simultaneously click the document object.

   Result: The document is highlighted.

3. Repeat Step 2 for each document that you want to print.

4. After you make your final selection, right-click and choose **Print** from the popup menu.

Copying Analysis Library Report Data

About copying Analysis Library report data

You can copy data from contiguous cells in an Analysis Library report to the Windows clipboard. You can choose to copy data that has been stripped of special formats such as thousands separators, currency signs, and percent symbols, or you can specify that the copy include these symbols.

Procedure: Copying Analysis library report data

To copy data from an Analysis Library report, follow these steps.

1. With the report open in the workspace, highlight the cells that you want to copy.

   You can select cells by using row and column selectors. You can also select cells by selecting a cell as a starting point, dragging the mouse pointer, and then releasing the mouse button at the end of the block.

   Note: You cannot select cells that are not contiguous.

2. Click the **Copy** button on the Document toolbar.

Alternatively, you can right-click the cells and choose **Copy** from the pop-up menu.

3. Choose one of the following copy options:

    ■ **Copy** — Copies the data but excludes formats such as thousands separators, currency signs, and percent symbols.

    ■ **Copy Special** — Presents a submenu from which you can select one of the following:

        * **Copy Data with Labels** — Copies the data but excludes formats such as thousands separators, currency signs, and percent symbols. Also copies row and column labels associated with the selection.

        * **Copy Number Formatted Data** — Copies the data and includes formats such as thousands separators, currency signs, and percent symbols.

        * **Copy Number Formatted Data with Labels** — Copies the data and includes formats such as thousands separators, currency signs, and percent symbols. Also copies the row and column labels associated with the selection.

        * **Copy Row Labels** — Copies the row labels that are associated with the selected data. Does not copy the actual data.

        * **Copy Column Labels** — Copies the column labels that are associated with the selected data. Does not copy the actual data.

Exporting Data from Analysis Library Documents

About exporting data from Analysis Library documents

You can export data from an Analysis Library report or graph to files that can be used in Microsoft Excel and other applications. You can select one of three export format options (CSV, TXT, or HTM for Excel 2000+), and export data from all pages or from a specific page

You can also select an option that will repeat the document's group labels in the export file and another option that will include the document's title, subtitle, and footnote. For a CSV, or TXT file, you can specify whether to include number

formatting in the export file. An Excel 2000+ HTM export file automatically includes number formats.

Note: If the document contains many pages of data, you might have difficulty opening the exported file in certain applications. To avoid this situation, modify the data selections to reduce the number of values before exporting the document.

Procedure: Exporting data from Analysis Library documents

To export data from an Analysis Library document, follow these steps:

1. With the document open in the workspace, click the **Export** button on the Document toolbar.

    Result: The Export dialog box appears.

2. Specify the pages to export: **Current** or **All *n* pages**.

3. In the As Type box, select the format for the export file:

    -   **Comma delimited (*.csv)** — Exports the data in Comma Separated Value format, in which labels and data values are separated by commas.

    -   **Tab delimited (*.txt)** — Exports the data in text file format, in which labels and data values are separated by tabs.

    -   **Excel 2000+ (*.htm)** — Exports the data in a format that can be read by a browser and opened in Excel version 2000 and version 2002, also known as XP. For more information, see "About Excel 2000+ output files" on page 15-16.

4. In the Options box, you can choose other properties for the export:

    -   **Include Number Formatting** — For a CSV or TXT export file, check this option to export the data with its current number formatting. Do not check this option if you want to export unformatted data. Note that an HTM export always includes number formatting.

    -   **Repeat Group Labels** — Check this option to repeat the outer labels for columns and rows of inner, nested dimensions. Do not check this option if you want the export file to display labels as they appear in the Analyzer screen display.

- **Include Title, Subtitle, Footnote** — Check this option if you want to include the title, subtitle, and footnote of the document as part of the export file. Do not check this option if you do not want to include these elements.

- **Create One Sheet per Page** — For an multi-page HTM export, check this option to export the data from each logical page to a separate worksheet. Do not check this option if you want to export the data from all pages to a single worksheet.

5. Choose **OK** to proceed.

   Result: If you chose CSV or TXT format, the The Save As dialog box opens. If you chose HTM format, the Export to HTML/Excel 2000+ dialog box opens.

6. Proceed as follows:

   a. In the Save in box, select the output directory for the file.

   b. In the File name box, enter a name for the file.

   c. Choose **OK** to export the file.

   Result: Depending on your browser configuration, the labels and data from the report may be displayed in a spreadsheet, or you may be prompted to perform additional tasks, such as saving the file to disk or choosing the application in which to display the data.

About Excel 2000+ output files

When you export data to a single worksheet, Analyzer generates a single HTML file in the directory that you specify.

When you export a multi-page file in Excel 2000+ and specify that you want to create one sheet per page, Analyzer generates an HTML table of contents file plus a number of other files in the specified directory. Use the table of contents file to access the individual worksheets

Types of Analysis Library Documents

What documents are available?

Your DBA determines which Analysis Library documents will be available to all users, and specifies the analysis dimensions for each document. The following sections describe *all* documents; however, the documents to which you have access might be a subset of this list.

Summary of document types

Oracle Sales Analyzer can include the following types of Analysis Library documents:

- Comparison
- Distribution
- Exception
- Forecast
- Growth
- Quota
- Ranking
- Review
- Trend

Comparison documents

Comparison documents compare products, geographies, and so forth, to highlight patterns, exceptions, and comparative performance. Comparison document subtypes are as follows:

- Comparison
- Comparison to Aggregate
- Mix Comparison
- Year-to-Year Comparison

Comparison

The Comparison document compares two dimension values for specified time periods. The comparison is based on a specified measure. The analysis shows difference and percentage difference.

Comparison to Aggregate

The Comparison to Aggregate document compares a dimension value to its aggregate for specified time periods. The comparison is based on a specified measure. The analysis shows percentage share.

Mix Comparison

The Mix Comparison document shows share of total for specified dimension values within a specified time period. Share of total is based on a specified measure.

Year-to-year Comparison

The Year-to-Year Comparison document compares the performance of a dimension value between a specified time period and the same time period in the previous year. Performance is based on a specified measure. The analysis shows difference and percentage difference.

Distribution documents

Distribution documents demonstrate how distribution affects performance. Distribution document subtypes are as follows:

- Increasing/Decreasing Sales
- New Sales

Increasing/Decreasing Sales

The Increasing/Decreasing Sales document identifies dimension values for which activity has increased or decreased by a specified percentage between two time periods. The analysis is based on a specified measure. The analysis shows difference and percentage difference.

New Sales

The New Sales document identifies dimension values that show activity in a specified time period, but did not show activity in a previous time period. Activity is based on a specified measure. The analysis shows the percentage of total for each dimension value.

Exception documents

Exception documents highlight dimension values in which performance differs substantially from the average. Exception document subtypes are as follows:

- 80/20 Rule
- Sales Above/Below Last Year
- Sales Above/Below Threshold

80/20 Rule

The 80/20 Rule document ranks dimension values that provided a specified percentage of activity within specified time periods. Activity is based on a specified measure. The analysis shows cumulative percentage.

Sales Above/Below Last Year

The Sales Above/Below Last Year document identifies dimension values that show a specified percentage of increased or decreased activity between a specified time period and the same time period in the previous year. Activity is based on a specified measure. The analysis shows difference and percentage difference.

Sales Above/Below Threshold

The Sales Above/Below Threshold document identifies dimension values for which activity is above or below a specified value threshold for specified time periods. Activity is based on a specified measure. The analysis shows totals.

Growth documents

There is one Growth document: Growth. The Growth document shows the difference in a dimension value's performance between two time periods. Performance is based on a specified measure. The analysis shows amount change and percentage change.

Quota documents

Quota documents compare the actual performance of dimension values such as products and geographies to a target. Quota document subtypes are as follows:

- Above/Below Quota
- Quota Performance

Above/Below Quota

The Above/Below Quota document identifies dimension values for which performance is higher or lower than a target for a specified time period. Performance is determined by comparing a specified measure (the base measure) to another measure (the comparison measure). The analysis shows difference and percentage difference.

Quota Performance

The Quota Performance document compares the performance of specified dimension values to a target for a specified time period. Performance is determined by comparing a specified measure (the base measure) to another measure (the comparison measure). The analysis shows the percentage of target obtained.

Ranking documents

Ranking documents rank dimension values in terms of a performance measure. Ranking document subtypes are as follows:

- Ranking
- Top/Bottom Ranking

Ranking

The Ranking document ranks specified dimension values in terms of performance during specified time periods. Performance is based on a specified measure. The analysis shows the share of total.

Top/Bottom Ranking

The Top/Bottom Ranking document ranks a specified number of top or bottom dimension values for two time periods in terms of performance. Performance is based on a specified measure. The analysis shows difference and percentage difference.

Review documents

Review documents present graphical and descriptive overviews of account and quota-related information. Review document subtypes are as follows:

- Account Review
- Quota Review

Account Review

The Account Review document presents a tabular and graphical analysis that compares the activity for specified dimension values between two time periods Activity is based on a specified measure.

Quota Review

The Quota Review document provides a tabular and graphical analysis that compares the activity for a specified dimension value within a specified time period to a target. Activity is based on a specified measure (the base measure), which is compared to another measure (the comparison measure).

Trend documents

Trend documents present performance trends over time for dimension values, such as products or geographies. Trend document subtypes are as follows:

- Cumulative Sales Trend document
- Moving Average/Total document
- Trend

Cumulative Sales Trend document

The Cumulative Sales Trend document quantifies activity for specified dimension values in terms of cumulative totals for the current year and the previous year. Activity is based on a specified measure. The analysis shows difference and percentage difference.

Moving Average/Total document

The Moving Average/Total document shows totals and moving averages for specified dimension values over a series of time periods. The averages and totals are based on a specified measure.

Trend document

The Trend document shows performance trends within a specified time range for specified dimension values. Performance is based on a specified measure.

16

Working with Custom Objects in the Web Environment

Chapter summary

This chapter describes how to define and use custom measures, custom aggregates, and saved selections in the Oracle Sales Analyzer Web environment.

List of topics

This chapter includes the following topics:

- About Custom Measures
- Defining Custom Measures
- Applying Custom Measures to Reports and Graphs
- About Custom Aggregates
- Defining Custom Aggregates
- Applying Custom Aggregates to Reports and Graphs
- About Saved Selections
- Defining Saved Selections
- Applying Saved Selections to Reports and Graphs
- Managing Custom Objects in the Navigation List

About Custom Measures

Definition: Custom measures

A *custom measure* is a formula that is based on one or more existing measures. You can use a custom measure in reports, graphs, forecasts, and criteria definitions, just as you would use a base measure.

You can define your own custom measures. You can also use custom measures that have been published to a public library to which you have access.

When to use custom measures

Custom measures can be useful when you want to create calculations based on stored or previously defined measures. For example, you might define custom measures to accomplish the following:

- Multiply price per unit by units to create a Dollar Sales measure
- Compare sales for the first three months of the current year with sales for the corresponding months of the previous year
- Sum up units sold over a specific number of time periods

Defining Custom Measures

About defining custom measures

When you define a custom measure, you name the measure, select the measure type, and indicate how data values for the measure will be displayed. You can also specify additional calculations for the measure.

Procedure: Defining a custom measure

To define a custom measure, follow these steps:

1. On the Navigator toolbar, click the **New** button,

and choose **New Custom Measure** from the popup menu.

Alternatively, you can right-click the Custom Measures folder in the navigation list and choose **New Custom Measure** from the popup menu.

Result: The New Custom Measure dialog box appears.

2. In the name boxes, enter a long name (up to 70 characters) and a short name (up to 16 characters) for the custom measure.

3. In the Type box, select the measure type. You can select one of the following:

- **Change** — Calculates the change in a measure's value between the current time period and a previous time period. You select the measure on which to base the calculation and specify a time period. This can be a custom time period, the prior time period, or year ago.

- **Fiscal-Year-to-Date** — Sums the value of a measure through the fiscal year to date. You select the measure on which to base the calculation.

- **Lag** — Calculates a measure that lags for a specified time period. You select the measure on which to base the lag and the lag interval.

- **Lead** — Calculates a measure that leads for a specified time period. You select the measure on which to base the lead and the lead time period.

- **Moving Average** — Averages the values of a measure over time. You select the measure on which to base the average and specify the number of time periods.

- **Moving Maximum** — Finds the maximum value for a measure within a specified time period. You select the measure and specify the number of periods to consider.

- **Moving Minimum** — Finds the minimum value for a measure within a specified time period. You select the measure and specify the number of time periods to consider.

- **Moving Total** — Sums the values of a measure over time. You select the measure and specify the number of time periods to consider.

- **Percent Change** — Calculates the percentage change in a measure's value between the current time period and a previous time period. You select the measure on which to base the calculation and specify a time period.

- **Year-to-Date** — Sums up a measure's values through the current calendar year. You select the measure on which to base the calculation.

- **Difference** — Subtracts the value of one measure from another. You select the measures.

- **Multiplication** — Multiplies the value of a measure by a numeric literal. You select the measure and enter the multiplier.

- **Ratio** — Divides the value of one measure by another measure. You select the measures.

- **Sum** — Adds the value of a measure and a numeric literal. You select the measure and enter the value to add.

- **Index** — Calculates the ratio between a specified dimension value of a measure and the same measure in a comparison or reference dimension. You select the measure, the dimension value, and the reference dimension.

- **Nested** — Performs simple nested formula calculations. These formulas take the form (A ? B) ? (C ? D), where you can replace each letter with a measure and each question mark with an arithmetic operator. You select the measures and specify the operators.

- **Share** — Compares a measure's value to the same measure's value for a specified share reference point, such as a level or another product and displays the results as a percentage. You select the measure and the reference value.

- **Variance** — Calculates the difference between the value of the measure for one dimension value and the value of the same measure for another dimension value. You select the measure and the dimension values.

Result: The components of the Definition box will change depending on the type of measure that you choose.

4. Complete the other fields in the Definition box. The information that you provide depends on the measure type. For example, if you are defining a difference measure, you select the base measure and the measure to subtract.

5. To specify an additional calculation to include in the definition, in the Additional Calculations box, enter a number and select an operator. To specify that calculated values be positive, check **Absolute Value**.

6. To specify format attributes for the data associated with this custom measure, choose **Format**. This opens the Format Number dialog box, where you can specify the following format options:

   ■ Number of decimal places

   ■ How positive and negative values will be displayed

   ■ Whether to use the thousands separator

   ■ Whether to display leading zeros

   ■ Whether to apply currency or percentage symbols, the symbols to use, and how positive and negative currency and percentage values will be displayed

   Choose **OK** to return to the New Custom Measure dialog box.

7. If there is a report or graph open in the workspace, you can apply the custom measure directly to the document. Check the **Apply to Open Report** or **Apply to Open Graph** box to add the custom measure to the measures in the document.

   If no document is open, you do not have this option.

8. Choose **OK** to save the custom measure.

Example: Custom measure definition

In the following example illustrates the definition for a ratio measure that calculates cost per unit sold. The formula divides Costs by Units.

What happens when you save a custom measure definition?

When you save a custom measure definition, Analyzer adds the measure to the list of available values that you can select for the Measure dimension. Analyzer also adds the custom measure as a personal object in the Custom Measures folder in the navigation list.

If you chose to apply the custom measure to the open document when you defined the custom measure, Analyzer adds the custom measure to the measures in the document.

Applying Custom Measures to Reports and Graphs

About applying custom measures to reports and graphs

You can apply a custom measure to an open report or graph. You can apply a custom measure that you have defined. You can also apply a custom measure that has been copied to a public library to which you have access. Applying a custom measure adds the measure to the current selections for the Measure dimension in the document.

Methods for applying custom measures to reports and graphs

You can use the following methods to apply a custom measure to an open report or graph:

- You can select a saved custom measure in the navigation list and use a right-click command to apply it to an open document.

- As you define a new custom measure or edit a custom measure definition, you can apply it to the open document.

Procedure: Applying a saved custom measure to an open report or graph

To apply a saved custom measure to an open report or graph, follow these steps:

1. In the navigation list, locate the custom measure that you want to use.

   Tip: To search for a custom measure, right-click the Custom Measures folder in the navigation list, choose **Find Custom Measures** from the navigation toolbar, and enter a name or name fragment. Alternatively, you can use the **Find** button on the navigation toolbar.

2. With the document open in the workspace, right-click the custom measure object and choose **Apply to Open Report** or **Apply to Open Graph**.

   Result: The document displays the custom measure as the last selection in the Measure dimension.

Procedure: Applying a new or modified custom measure to an open report or graph

To apply a custom measure to an open report or graph as you define or modify the custom measure, click **Apply to Open Report** or **Apply to Open Graph** in the New Custom Measure or Edit Custom Measure dialog box. When you choose **OK**, Analyzer will apply the custom measure to the document.

Example: Applying a new custom measure to an open report

In the following example, the user applies a new custom measure definition to an open report.

About Custom Aggregates

Definition: Custom aggregate

A *custom aggregate* is a single dimension value that combines multiple values from a dimension into a single value. You can use a custom aggregate in reports, graphs, forecasts, and criteria definitions, just as you would use a standard dimension value.

You can define your own custom aggregates. You can also use custom aggregates that have been published to a public library to which you have access.

When to use custom aggregates

A custom aggregate is useful when you want to view and manipulate a group of values as a single entity. For example, you might define custom aggregates for the following:

- Key accounts in a geographic region
- High-end products
- Non-standard time periods, such as the first three weeks in September
- Re-aligned region, such as Old Eastern Region and Ohio

Defining Custom Aggregates

About defining custom aggregates

When you define a custom aggregate you name the aggregate, specify the dimension for the aggregate, and select its member values. You can also specify how a specific member will be processed within the aggregate.

For example, you might create a custom aggregate that combines the values for five accounts within a region into a single value. If you were creating a what-if scenario for re-aligning geographies, you might create a custom aggregate that subtracts an account from a region.

Procedure: Defining a custom aggregate

To define a custom aggregate, follow these steps:

1. On the Navigator toolbar, click the **New** button,

    and choose **New Custom Aggregate** from the popup menu.

    Alternatively, you can right-click the Custom Aggregates folder in the navigation list or the Custom Aggregates folder for a specific dimension. Then choose **New Custom Aggregate** from the popup menu.

    Result: If you use the right-click method on the main Custom Aggregates folder, the Custom Aggregates dialog box displays a default dimension. If you use the right-click technique on a specific Custom Aggregates folder, the Custom Aggregates dialog box displays the selected dimension.

2. In the dimension box, select the dimension for the custom aggregate.

3. In the name boxes, enter a long name (up to 70 characters) and a short name (up to 16 characters) for the custom aggregate.

4. Click the **Selector** button to access the Select Data dialog box and select the values that will comprise the custom aggregate.

    You can select values from a list. You can also use the buttons on the Data Selection toolbar to select values by specific criteria and sort your selections. For information about selecting and sorting values, see Chapter 17.

5. If this is a Time aggregate, you can define additional custom aggregates for prior time periods. You can choose one or both of the following:

    -   **Year Ago** — Creates a custom aggregate for the same time period in the previous year. For example, if you define a custom aggregate whose members are two months (November and December) of the current year, choosing **Year Ago** will also define a custom aggregate for November and December of the previous year.

    -   **Prior Period** — Creates a custom aggregate for the previous time segment. For example, if you define a custom aggregate whose members are two months (November and December) of the current year, choosing **Prior Period** will also create a custom aggregate for September and October of the current year.

6. When your selections are complete, choose **OK** to return to the New Custom Aggregate dialog box.

   Result: The Members list displays the selected values. A plus sign (+) next to a value indicates that the value is additive.

7. To subtract a value from the aggregate, click the plus sign next to that value.

   Result: A minus sign (-) appears next to the value, indicating that it is subtractive.

8. If there is a report or graph open in the workspace and the document includes the dimension for the custom aggregate, you can apply the custom aggregate directly to the document. Check the **Apply to Open Report** or **Apply to Open Graph** box to add the custom aggregate to the dimension values in the document.

   If no document is open, you do not have this option.

9. Choose **OK** to create the custom aggregate.

   Note: Time aggregates for Year Ago or Prior Period require positive member values. If you try to include a subtractive value in the aggregate definition, the system will create the custom aggregate, but will not create Year Ago or Prior Period aggregates.

Example: Custom aggregate definition

The following example illustrates a custom aggregate definition, High End Products, that includes four values in the Product dimension. The plus sign (+) indicates that the members are additive.

What happens when you save a custom aggregate definition?

When you save a custom aggregate definition, Analyzer adds the custom aggregate to the value selection list for the dimension. Custom aggregates are independent of any hierarchy. They are displayed for all hierarchies within a dimension.

Analyzer also adds the custom aggregate as a personal object in the Custom Aggregates folder for the dimension in the navigation list. For example, if you create a custom aggregate for geography, it will be displayed in the Geography folder within the Custom Aggregates folder in the navigation list.

Note: Year Ago and Prior Period custom aggregates will be available when you select dimension values for the Time dimension. However, unique objects for these derived aggregates will not appear in the navigation list

If you chose to apply the custom aggregate to the open report or graph when you defined the custom aggregate, Analyzer adds the custom aggregate to the current values for the dimension in the document. For example, if Geography is in the row position and you apply a geography custom aggregate, Analyzer will add a row that displays values for the custom aggregate.

Applying Custom Aggregates to Reports and Graphs

About applying custom aggregates to reports and graphs

You can also apply a custom aggregate directly to an open report or graph. You can apply a personal custom aggregate that you have defined. You can also apply a custom aggregate that has been copied to a public library to which you have access. Applying a custom aggregate adds the aggregate value to the current values for the dimension in the document.

Methods for applying custom aggregates to reports and graphs

You can use the following methods to apply a custom aggregate to an open report or graph:

- You can select a saved custom aggregate in the navigation list and use a right-click command to apply it to the open document.

- As you define a new custom aggregate or modify a custom aggregate definition, you can apply it directly to the open document.

Procedure: Applying a saved custom aggregate to an open report or graph

To apply a previously saved custom aggregate to an open report or graph, follow these steps:

1. In the navigation list, locate the custom aggregate that you want to use.

    Tip: To search for a custom aggregate in the navigation list, right-click the Custom Aggregates folder or the Custom Aggregates folder for a specific dimension, choose **Find Custom Aggregates**, and enter a name or name fragment. Alternatively, you can use the **Find** button on the navigation toolbar.

2. Ensure that the open document includes the dimension to which the custom aggregate refers.

3. Right-click the custom aggregate object and choose **Apply to Open Report** or **Apply to Open Graph**.

    Result: The document displays the custom aggregate as the last selection for the specified dimension.

Procedure: Applying a new or modified custom aggregate to a report or graph

To apply a custom aggregate to an open report or graph when you define or modify the custom aggregate definition, click **Apply to Open Report** or **Apply to Open Graph** in the New Custom Aggregate or Edit Custom Aggregate dialog box. When you choose **OK**, Analyzer will apply the custom aggregate to the document.

Example: Applying a new custom aggregate to an open report

In the following example, the user applies a new custom aggregate definition to an open report.

About Saved Selections

Definition: Saved selection

A *saved selection* is a set of dimension values that you save once and reuse in reports, graphs, and Analysis Library documents.

You can define your own saved selections. You can also use saved selections that have been published to a public library to which you have access.

When to use saved selections

Saved selections are useful when you want to quickly retrieve a group of values without repeating the steps that you followed to select them. Selections that are saved as steps (for example, "the top ten products based on Sales in geographies *x*, *y*, and *z* during the previous quarter") also provide the ability to dynamically update your analyses. Once you define a saved selection, you can replace the dimension values in an open report, graph, or Analysis Library document with the saved selection.

Defining Saved Selections

About defining saved selections

When you create a saved selection, you name the saved selection, specify the dimension for the saved selection, and select the component dimension values. You also specify whether to save the dimension *members* or the selection *steps*.

Saving members

Saving members saves the actual dimension values. A member selection is always comprised of the same values, regardless of when the selection is applied. Save a selection as members when you want to examine data for the same dimension values on an ongoing basis. For example, you might save a selection as members if you are a regional sales manager who plans to review the performance of the same markets on a regular basis.

Saving steps

Saving steps saves the script that drives the selection criteria, rather than the actual values. Save a selection as steps when you anticipate applying the same criteria repeatedly over a long period of time, but expect that the values that comprise the selection might change. For example, you might save a selection as steps if you conduct quarterly reviews of the top ten products selling in your region.

Methods for defining saved selections

You can define a saved selection directly from the navigation list, or you can define it on-the-fly as you select data.

Procedure: Defining a saved selection from the navigation list

To define a saved selection from the navigation list, follow these steps:

1. On the Navigator toolbar, click the **New** button,

    and choose **New Saved Selection** from the popup menu.

    Alternatively, you can right-click the Saved Selections folder in the navigation list or the Saved Selections folder for a specific dimension. Then choose **New Saved Selection** from the popup menu.

    Result: The New Saved Selection dialog box appears. If you used the right-click technique on the Saved Selections folder, the New Saved Selections dialog box displays a default dimension, which you can change. If you used the right-click technique on a Saved Selections folder for a specific dimension, the Saved Selections dialog box displays the selected dimension.

2. In the Name box, enter a name for the saved selection (up to 70 characters).

3. Click the **Selector** button.

    Result: The Select Data dialog box appears.

4. Select the values that will comprise the saved selection.

    You can select values from a list. You can also use the buttons on the Data Selection toolbar to select values by specific criteria and sort your selections. For more information about the tools and techniques for selecting and sorting dimension values, see "Selecting Data in the Web Environment" on page 17-1.

5. When your value selections are complete, choose **OK**.

    Result: The New Saved Selection dialog box displays. The Selections box displays the values that will comprise the saved selection.

6. Specify how you want the values to be saved:

   - **Save steps** — Saves the steps that you followed to select the values.

   - **Save members** — Saves the actual dimension values.

   For information about these options, see "About defining saved selections" on page 16-16.

   Note: If you used the drag and drop method or a right-click function to sort values for the selection, then you will not be able to save steps.

7. In the Description box, you can enter optional text to describe the saved selection.

8. If there is a document open in the workspace and the document includes the dimension for the saved selection, you can apply your saved selection to the document. To apply the saved selection to the document, check the **Apply to Open Report** or **Apply to Open Graph** box.

   If no document is open, you do not have this option.

9. Choose **OK** to save the selection.

Procedure: Defining and saving a selection from within a document

To define a saved selection from within a document, follow these steps:

1. With the document open in the workspace, click the **Select Data** button on the Document toolbar.

2. From the drop-down list, select a dimension.

   Result: The Select Data dialog box appears, displaying values for the dimension.

3. Choose the values that will comprise the saved selection.

   You can select values from a list, or you can use the buttons on the Data Selection toolbar to select and sort values by specific criteria. For information about selecting and sorting values, see Chapter 17.

4. Click the **Save Current Selection** button on the toolbar.

   Result: The Save a Selection for *Dimension* dialog box appears.

5. In the Save a Selection for *Dimension* dialog box, enter information for the saved selection as follows:

   a. In the Save current selection as box, enter a name for the saved selection (up to 70 characters).

   b. In the Description box, you can enter optional text to describe the saved selection.

   c. Specify how you want the selection to be saved:

      * **Save steps** — Saves the steps that you followed to select the values

      * **Save members** — Saves the actual dimension values

   For information about these options, see "About defining saved selections" on page 16-16.

   Note: If you used the drag and drop method or a right-click function to sort values for the selection, then you will not be able to save steps.

6. Choose **OK** to save the selection and apply it to the current document.

Example: Saved selection definition

The following illustration shows the New Saved Selection dialog box, which appears when you define a saved selection from the navigation list. The example shows a selection of product values that will be saved as steps. The user has

provided a descriptive name and has entered optional text that further describes the saved selection.
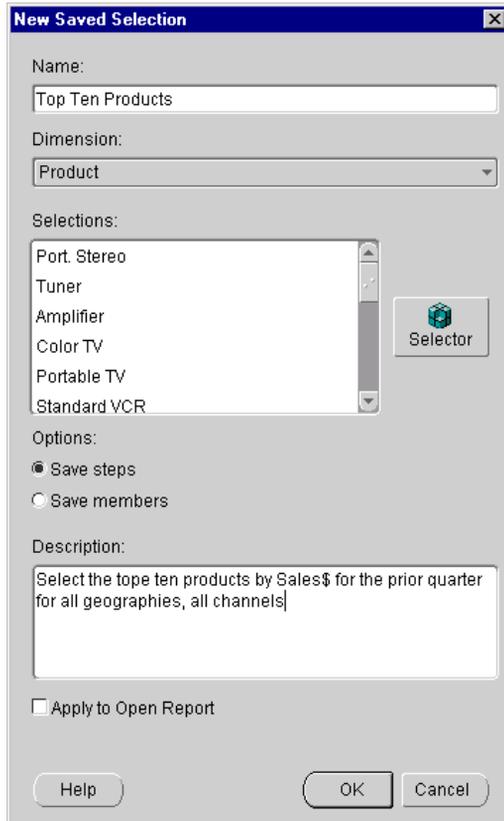
What happens when you save a selection?

When you save selected values, Analyzer adds the saved selection as a personal object in the Saved Selections folder for the dimension in the navigation list. For example, if you define a saved selection of geography values, it will be displayed in the Geography folder within the Saved Selections folder for the dimension in the navigation list.

If you defined the saved selection from within a document or chose to apply the saved selection to the open report or graph as you defined it, Analyzer replaces the current values for the dimension with the saved selection.

Applying Saved Selections to Reports and Graphs

About applying saved selections to reports and graphs

You can apply a saved selection to an open report or graph. You can apply a saved selection that you have defined. You can also apply saved selection that has been copied to a public library to which you have access. Applying a saved selection replaces all of the values for the dimension with the values in the saved selection.

Methods for applying saved selections to reports and graphs

You can use the following methods to apply a saved selection directly to an open report or graph:

- You can choose a previously saved selection in the navigation list and use a right-click command to apply it to an open document.

- You can use the **Apply Saved Selection** tool in the Select Data dialog box and choose a previously saved selection to apply.

- As you define or modify a saved selection, you can apply it to an open document.

Procedure: Applying a saved selection to an open report or graph

To apply a previously saved selection of values to an open report or graph, follow these steps:

1. In the navigation list, locate the saved selection that you want to use.

   Tip: To search for a saved selection, right-click the Saved Selections folder or the Saved Selections folder for a dimension, choose **Find** from the popup menu, and enter a name or name fragment. Alternatively, you can use the **Find** button on the navigation toolbar.

2. Ensure that the open document includes the dimension to which the saved selection refers.

3. Right-click the saved selection object. From the popup menu, choose **Apply to Open Report** or **Apply to Open Graph**.

    Result: The saved selection replaces the values for the dimension in the document.

Procedure: Using a tool on the Document toolbar to apply a saved selection to a report or graph

To use a tool to apply a saved selection of values to an open report or graph, follow these steps:

1. With the document open in the workspace, click the **Apply Saved Selection** button on the Data Selection toolbar.

    Result: A list of dimensions for which one or more saved selections have been defined appears.

2. Select a dimension.

    Result: The Apply Saved Selection dialog box appears. The Available box lists the saved selections for the dimension that you chose.

3. Choose a saved selection from the list.

4. You can choose **Preview** to preview the values that will be selected as a result of your choice.

5. Choose **OK** to apply the saved selection.

    Result: The values in the document change to reflect the saved selection.

Procedure: Applying a new or modified saved selection to an open report or graph

To apply a saved selection of values to an open report or graph as you define or modify the saved selection, click **Apply to Open Report** or **Apply to Open Graph** in the New Saved Selection or Edit Saved Selection dialog box. When you click **OK**, Analyzer will apply the saved selection to the document.

Example: Applying a new saved selection to a report

In the following example, the user applies a new saved selection definition to an open report.

Managing Custom Objects in the Navigation List

Navigation list functions for custom objects

Within the navigation list, you can create a new custom measure, custom aggregate, or saved selection and apply these objects to an open report or graph. You can also work with custom measures, custom aggregates, and saved selections as follows:

- Search for a custom object

- Modify the definition of a personal custom object

- Rename a personal custom object

- View an object's properties

- Delete a personal custom object

Procedure: Searching for a custom object

To search for a custom measure, custom aggregate, or saved selection, follow these steps:

1. Right-click the appropriate folder in the navigation list and choose the **Find** option from the popup menu.

   Note: Custom aggregates and saved selections are categorized by dimension. You can search a dimension folder as well as the main folder.

2. Enter a name or name fragment.

Procedure: Modifying a personal custom object

To modify a personal custom measure, custom aggregate, or saved selection, follow these steps:

1. Double-click the object in the navigation list. Alternatively, you can right-click it and choose **Edit** from the popup menu.

   Result: A dialog box appears, showing the object's name and current definition.

2. You can change the object name and make new selections.

3. Choose **OK** to save your changes.

   Note: If you modified a public object, you will be prompted to provide a new name.

Procedure: **Renaming a personal custom object**

To rename a personal custom measure, custom aggregate, or saved selection, right-click the object in the navigation list, choose **Rename** from the popup menu, and enter the new name.

Procedure: **Viewing custom object properties**

To view saved the properties of a custom measure, custom aggregate, or saved selection, right-click the object in the navigation list and choose **Properties** from the popup menu.

The following information is displayed:

- Name
- Created
- Modified
- Class
- Library (appears only if Class is PUBLIC)

Deleting a personal custom object

Important: Before you delete a custom object, you should ensure that there are no saved reports, graphs, or forecasts that reference it.

To delete a personal custom measure, custom aggregate, or saved selection, click the object in the navigation list and choose the **Delete** button on the Navigation toolbar.

Alternatively, you can right-click the object and choose **Delete** from the popup menu.

In either case, the system will ask you to confirm the deletion.

Procedure: **Deleting more than one custom object**

Important: Before you delete custom objects, you should ensure that there are no saved documents that reference the objects.

To delete more than one personal custom measure, custom aggregate, or saved selection, follow these steps:

1. In the navigation list, open the folders that contain the personal objects that you want to delete.

2. Scroll to an object, press the CTRL key and simultaneously click the object.

    Result: The object is highlighted.

3. Repeat the previous step for another personal object.

    Note: You must select the same types of objects. For example, all of the selected objects must be saved selections. Also, for custom aggregates and saved selections, the selected objects must be in the same dimension.

4. After you make your final selection, right-click and choose **Delete** from the popup menu.

    Result: You will be prompted to confirm the deletion.

Publishing a custom object

You can share a personal custom measure, custom aggregate, or saved selection with other users by "publishing" the object to a public library to which you have read/write access.

You can also publish a public custom object to your personal library. You might want to do this if you want to modify the object's definition.

For more information, see "Using Publishing to Share Objects" on page 18-9.

17

Selecting Data in the Web Environment

Chapter summary

This chapter describes how to select data in the Analyzer Web environment.

List of topics

This chapter includes the following topics:

- About Data Selection
- Selecting Values from a List
- Selecting Values by Level
- Selecting Values by Family Relationship
- Selecting Values by Attribute
- Selecting Values that Match a Character String
- Selecting Values that Meet a Value Condition
- Selecting Values that Meet a Measure Condition
- Selecting Top and Bottom Values
- Selecting Time Values by Range
- Saving Selected Values
- Ordering Selected Values

About Data Selection

Overview

Analyzer offers a number of techniques for selecting data. You can choose values from a list, use a tool to establish selection criteria, or use a combination of list and tool operations. This chapter discusses these techniques.

You can also change the data in a document by applying saved selections, custom measures, and custom aggregate. For information about these functions, see "Working with Custom Objects in the Web Environment" on page 16-1.

Accessing data selection tools

When you are working with a report or graph, you use the **Select Data** tool on the Document toolbar to choose dimension values for the document.

When you are working with a custom aggregate or saved selection, you use the **Selector** button to select dimension values.

When you are working with an Analysis Library document, you use the **Custom Selection** option to choose custom values. The **Custom Selection** option appears in the popup menu when you click a hyperlink setting for a dimension value.

Data selection tools

The Data Selection toolbar appears at the top of the dialog box for selecting data. The toolbar buttons allow you to perform the following functions.

Button	Description	Function
	Apply Saved Selection	Applies a saved selection to an open report or graph. (Appears only when you are selecting data for a report or graph)
	Save Current Selection	Saves selected values as a custom saved selection.

Button	Description	Function
	Choose Values by Level	Select values at specified levels in a hierarchy.
	Choose Values by Family	Select values that have a specified relationship.
	Choose Values by Attribute	Select values that share specified attributes.
	Choose Matching Values	Select values that match one or more character strings.
	Choose Values Meeting Value Condition	Select values based on the way in which the values in a measure compare to a specified value or range of values.
	Choose Values Meeting Measure Condition	Select values based on the way in which the values in one measure compare to the values in another measure.
	Choose Top/Bottom Values	Select the largest and smallest values.
	Choose Values by Range	Select values by time range. (Appears only for the Time dimension)
	Sort	Sort selected values.

Selecting Values from a List

About selecting values from a list

When you select data for documents, saved selections, and custom aggregates, you can choose a dimension and select one or more values from a list of values for that dimension.

Procedure: Selecting values from a list

To select values from a list, follow these steps:

1. Do one of the following:

   - If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

   - If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

   Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, in the Organize by box, you can select the hierarchy that you want to work with.

   Result: The values in the Available box might change depending on which hierarchy you choose.

3. Move values between the Available and Selected boxes until the Selected box contains the dimension values that you want.

   For information about searching for values, expanding the value list, and adding values to and removing values from the Selected box, see "Techniques for selecting values from a list" on page 17-5.

4. You can order values in the Selected box according to how you want your selections to appear.

   For more information, see "Ordering Selected Values" on page 17-32.

5. Choose **OK** to select the values in the Selected box.

Techniques for selecting values from a list

Searching for values in the Available box

You can use the **Find** button to search for a value by name. The **Find** button is located under the list of available values. It resembles a pair of binoculars.

Expanding and collapsing values in the Available box

You can view data at various levels by expanding and collapsing aggregate dimension values. For example, if the list displays a Geography that includes lower level values, you can expand the list to show component geographies. You can subsequently collapse the list to reaggregate the display.

An aggregate value is preceded by a plus sign (+), indicating that it can be expanded. An expanded value is preceded by a minus sign (-), indicating that it can be collapsed. Double-click the plus sign to expand a value. Double-click the minus sign to collapse a value. You can also use the **Expand All** and **Collapse All** buttons to expand or collapse all values. These buttons are located under the list of available values, next to the **Find** button. The **Expand** and **Collapse** buttons resemble large plus and minus symbols.

Adding values to the Selected box

You can add one or more values in the Available box to the Selected box as follows:

- To add a single value, double-click the value

    or

    Highlight the value and click the single arrow button that points to the Selected box.

- To add multiple nonsequential values, press and hold the CTRL key, click each value, and then click the single arrow button that points to the Selected box.

- To add multiple sequential values, select the first value, press and hold the SHIFT key, select the last value, and then click the single arrow button that points to the Selected box.

- To add all values, click the double arrow button that points to the Selected box.

Removing values from the Selected box

You can remove values from the Selected box as follows:

- To remove a single value, double-click the value

    or

    Highlight the value and click the single arrow button that points to the Available box.

- To remove multiple nonsequential values, press and hold the CTRL key, click on each value, and then click the single arrow button that points to the Available box.

- To remove multiple sequential values, select the first value, press and hold the SHIFT key, select the last value, and then click the single arrow button that points to the Available box.

- To remove all values, click the double arrow button that points to the Available box.

Note: You can also choose the values that you want to remove, right-click and choose **Remove** from the popup menu.

Example: Selecting values from a list

The following illustration shows the Select Data dialog box. In the example, the user selects five values in the Geography dimension.
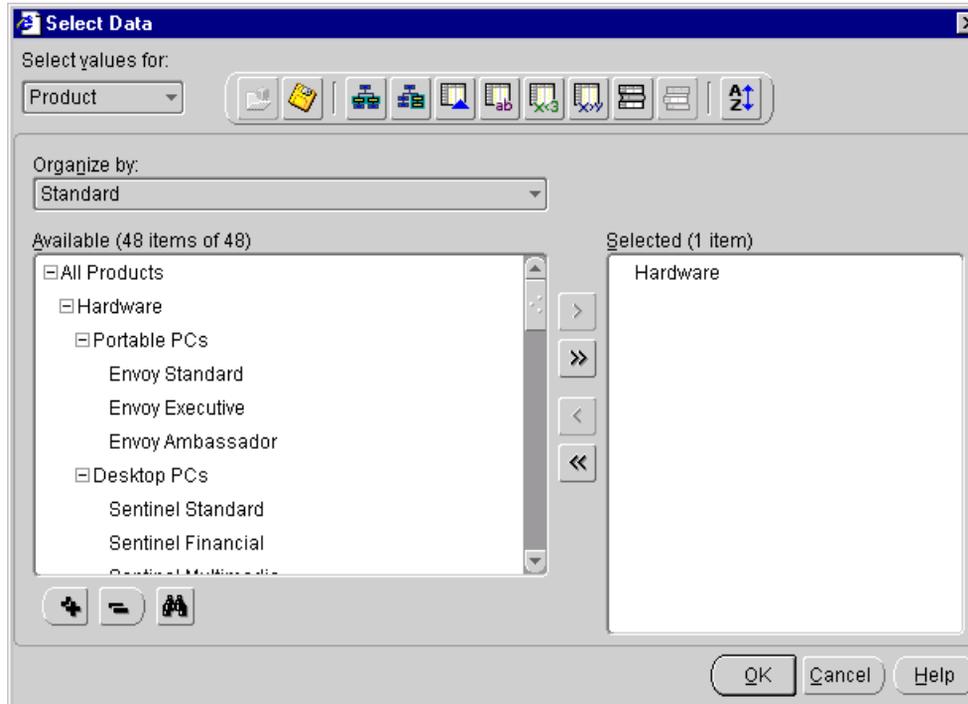
Selecting Values by Level

About selecting values by level

When you are working with a hierarchical dimension, you can limit selections to values at one or more levels of the hierarchy. For example, in a Geography dimension you might select values at the Region and District levels.

Procedure: Selecting values by level

To select values by level, follow these steps:

1. Do one of the following:

   - If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

   - If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

   Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. In the Organize by box, select the hierarchy that you want to work with.

   Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Values By Level** button on the toolbar.

   Result: The Choose *Values* By Level dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values to affect the values in the Selected box of the Select Data dialog box:

   - To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

   - To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

   - To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

   - To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. In the *Level* box, select one or more levels. Use CTRL+click or SHIFT+click to select more than one level.

6. You can choose **Preview** to preview the values that will be selected as a result of your choices.

7. Choose **OK**.

   Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

8. You can order values in the Selected box according to how you want your selections to appear.

   For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting values by level

The following illustration shows the Choose *Values* By Level dialog box. In the example, the user selects Geography values at the Region and District levels.
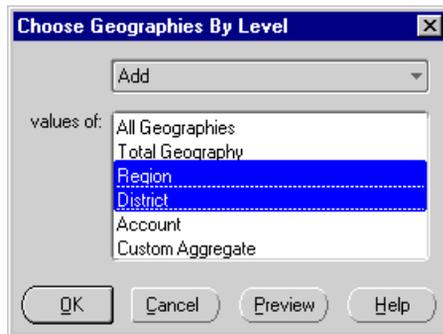
Selecting Values by Family Relationship

About selecting values by family relationship

When you are working with a hierarchical dimension, you can select values according to their familial relationships with other values in the hierarchy. For example, in a Geography dimension you might select descendants of Massachusetts and New York.

Procedure: Selecting values by family

To select values by family relationship, follow these steps:

1. Do one of the following:

    ▪ If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

    ▪ If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

    Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. In the Organize by box, select the hierarchy that you want to work with.

    Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Values By Family** button on the toolbar.

    Result: The Choose *Values* By Family dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values to affect the values in the Selected box of the Select Data dialog box, as follows:

   - To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

   - To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

   - To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

   - To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. In the *family of* box, select the values whose family members you want to choose.

   You can accept the default value, or click the *Ellipsis* button to access a dialog box where you can select one or more alternate values. Use CTRL+click and SHIFT+click to select multiple values.

6. In the *operator* box, select the term that determines how the value or values that you select in Step 7 will relate to the value or values that you chose in the previous step. You can choose **at the level** (the default), or you can click the box to select **using the relationship**.

7. In the *relationship type* box, select one or more relationships that will be used to select values. Use CTRL+click and SHIFT+click to select multiple values.

8. You can choose **Preview** to preview the values that will be selected as a result of your choices.

9. Choose **OK**.

   Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

10. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting values by family

The following illustration shows the Choose *Values* By Family dialog box. In the example, the user selects products in three divisions using two relationships.
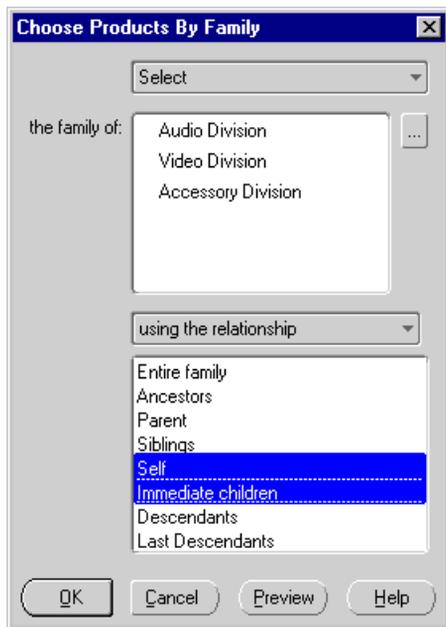
Selecting Values by Attribute

About selecting values by attribute

If your database includes attributes for dimension values, you can select values based on one or more attributes that all of the values have in common. For example, in a Product dimension you might select deodorant products where the form attribute is "roll-on."

Procedure: Selecting values by attribute

To select values by attribute, follow these steps:

1. Do one of the following:

    ■   If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

    ■   If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

    Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, in the Organize by box you can select the hierarchy that you want to work with.

    Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Values By Attribute** button on the toolbar.

    Result: The Choose *Values* By Attribute dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

    ■   To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

    ■   To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

    ■   To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

    ■   To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. If you selected a hierarchy in the Organize by box, the *Level* box contains levels for that hierarchy. Select one or more levels at which you want to choose values. Use CTRL+click or SHIFT+click to select multiple levels.

6. In the where box, select an attribute.

7. In the is box, select one or more values for the attribute. Use CTRL+click or SHIFT+click to select multiple values.

8. You can choose **Preview** to preview the values that will be selected as a result of your choices.

9. Choose **OK**.

    Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

10. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting values by attribute

The following illustration shows the Choose *Values* By Attribute dialog box. In the example, the user chooses Audio Division as the attribute for selecting product values.
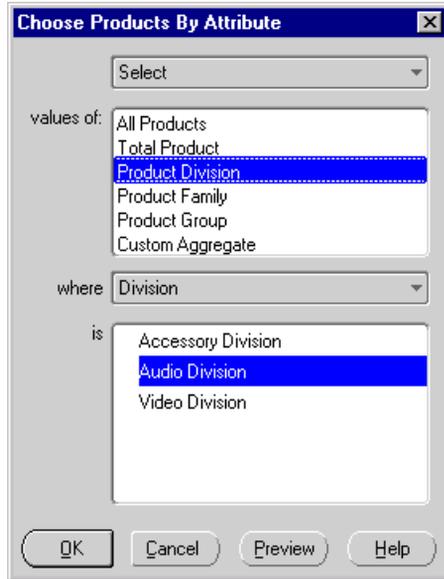
Selecting Values that Match a Character String

About selecting values that match a character string

You can select dimension values that contain, start with, end with, or exactly match one or more alphanumeric character strings and specify whether to base the match on long labels, short labels, medium labels, all labels, or dimension members.

For example, in a Product dimension you might select products that match any of the lines "mini" or "maxi."

Procedure: Selecting values that match a character string

To select values that match a specific character string, follow these steps:

1. Do one of the following:

    -   If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

    -   If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

    Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, in the Organize by box you can select the hierarchy that you want to work with.

    Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Matching Values** button on the toolbar.

    Result: The Choose Matching *Values* dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

    -   To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

    -   To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

    -   To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

    -   To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. If you selected a hierarchy in the Organize by box, the *values of* box contains levels for that hierarchy. Select one or more levels at which you want to choose values. Use CTRL+click or SHIFT+click to select more than one level.

6. In the *that* box, specify the term that describes how the values must match the characters that you enter in the *values to match* box. You can choose **contain**, **start with**, **end with**, or **are identical with**.

7. In the *lines* box select the option that specifies how you want the system to search for matching values:

   ■ **any of the lines** — Retrieves dimension values that match any of the entries in the v*alues to match* box. This is equivalent to the boolean OR operator.

   ■ **all of the lines** — Retrieves dimension values that match all of the entries in the *values to match* box. This is equivalent to the boolean AND operator. This option is available only when the option in the *lines* box is **contains**.

8. In the *values to match* box, enter one or more alphanumeric strings that you want to match. Use separate lines to enter multiple values.

9. In the *using* box, choose the type of dimension label within which you want to match values. You can select one of the following:

   ■ **Long label** — Limits the search for matching values to long dimension value label names.

   ■ **Short label** — Limits the search for matching values to short dimension value label names.

   ■ **Dimension members** — Limits the search for matching values to internal dimension value keynames.

   ■ **Any label** — Searches all dimension label name types for matching values.

10. If the values must also match the case that you have specified in the *values to match* box, choose **Match case**.

11. You can choose **Preview** to preview the values that will be selected as a result of your choices.

12. Choose **OK**.

   **Result:** The Select Data dialog box reappears. The values that match your specifications are displayed in the Selected box.

13. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see .

Example: Selecting values that match a character string

The following illustration shows the Choose Matching *Values* dialog box for the Product dimension. In the example, user specifies "mini" and "maxi" as the values to match.
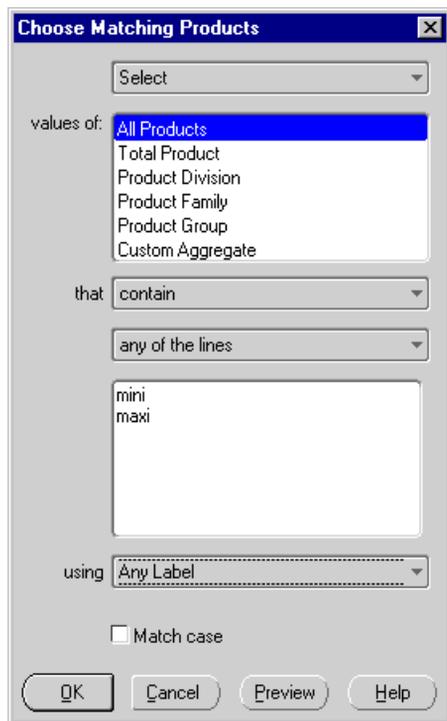
Selecting Values that Meet a Value Condition

About selecting values that meet a value condition

You can select dimension values that relate to a value in a specific way. For example, in a Geography dimension you might select geographies where Sales for a selected product and time period exceeds a specified amount.

Procedure: Selecting values that meet a value condition

To select values that meet a value condition, follow these steps:

1. Do one of the following:

    - If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

    - If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

    Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, in the Organize by box, you can select the hierarchy that you want to work with.

    Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose *Values* Meeting Value Condition** button on the toolbar.

    Result: The Choose *Values* Meeting Value Condition dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

   ■ To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

   ■ To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

   ■ To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

   ■ To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. If you selected a hierarchy in the Organize by box, the *Level* box contains levels for that hierarchy. Select one or more levels at which you want to choose values. Use CTRL+click or SHIFT+click to select more than one level.

6. In the *measure* box, select the measure on which to base the condition.

   You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

7. In the *operator* box, choose the operator that specifies how the values for the measure that you selected in Step 6 must relate to a value.

   Note: The operators that you can choose depend on the type of measure (numeric, text, boolean, or data) that you selected in Step 6. For example, if you selected a numeric measure, you can choose **is equal to**, **is not equal to**, **is greater than**, **is greater than or equal to**, **is less than**, **is less than or equal to**, **is between**, or **is not between**.

8. In the *values* box, enter the value to which the values in the measure will be compared. If you chose the **is between**, **is not between** or **is outside** operator, you must specify two values.

9. The *Dimensions* box displays default qualifying dimension values for the comparison.

    You can accept the default values that appear in the box, or you can select an alternate qualifying value for a dimension. To select an alternate value, highlight the dimension whose value you want to change and click the **Dimension Values** button.

10. You can specify additional conditions for the comparison as follows:

    ■   To exclude missing values from the values that you are selecting, choose **Exclude missing values**.

    ■   To exclude zero values from the values that you are selecting for a numeric measure, choose **Exclude zero values**.

    ■   To match the case of a text measure, choose **Match Case**.

11. You can choose **Preview** to preview the values that will be selected as a result of your choices.

12. Choose **OK**.

    Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

13. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting values that meet a value condition

The following illustration shows the Choose *Values* Meeting Value Condition dialog box. In the example, the user selects geographies where Units Sold is greater than 2,000,000 for Hardware products distributed through all channels in June.
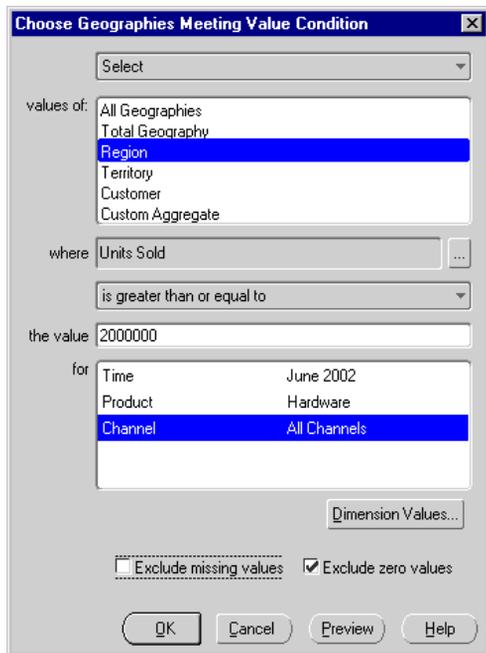
Selecting Values that Meet a Measure Condition

About selecting values that meet a measure condition

You can select values based on the way in which the values in one measure compare to the same values in another measure. For example, in a Geography dimension you might select geographies where Sales is 10% greater than Quota for a specified product and time period.

Procedure: Selecting values that meet a measure condition

Follow these steps to select values that meet a measure condition:

1. Do one of the following:

   - If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

   - If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

   Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, you can select a hierarchy in the Organize by box.

   Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose *Values* Meeting Measure Condition** button on the toolbar.

   Result: The Choose *Values* Meeting Measure Condition dialog box appears for the dimension that you selected in Step 1.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

   - To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

   - To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

- To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

- To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. If you selected a hierarchy in the Organize by box, the *Level* box contains levels for that hierarchy. Select one or more levels at which you want to choose values. Use CTRL+click or SHIFT+click to select more than one level.

6. In the first *measure* box, select the measure on which to base the condition.

    You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

7. In the where box, choose an operator that specifies how the values in the measure that you selected in the previous step must relate to a comparison measure.

    Note: The operators from which you can choose depend on the type of measure (numeric, text, boolean, or data) that you selected in Step 6. For example, if you selected a numeric measure, you can choose **is equal to**, **is not equal to**, **is greater than**, **is greater than or equal to**, **is less than**, **is less than or equal to**, **is between**, or **is not between**.

8. In the *Comparison* box, select the measure whose values will be compared to those of the measure in the *measure* box.

    You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

9. To include an additive or subtractive value in the comparison for a numeric measure, proceed as follows:

    a. If you choose **less than** or **greater than** in Step 7, select **plus** or **minus**. If you chose **between** or **not between** in Step 7, plus or minus is the only selection.

    b. In the *value* box, enter the value to be added or subtracted when the measure values are compared.

    c. If the value is a percentage, choose **percent**.

10. The *Dimensions* box displays default qualifying dimension values for the comparison.

    You can accept the default values that appear in the box, or you can select an alternate qualifying value for a dimension. To select an alternate value, highlight the dimension whose value you want to change and click the **Dimension Values** button.

11. You can specify additional conditions for the comparison as follows:

    ■ To exclude missing values, choose **Exclude missing values**.

    ■ To exclude zero values for a numeric measure, choose **Exclude zero values**.

    ■ To match the case of a text measure, choose **Match Case**.

12. You can choose **Preview** to preview the values that will be selected as a result of your choices.

13. Choose **OK**.

    Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

14. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting values that meet a measure condition

The following illustration shows the Choose *Values* Meeting Measure Condition dialog box. In this example, the user selects accounts where Sales is greater than Customer Discount plus 10% for products distributed through all channels in June.
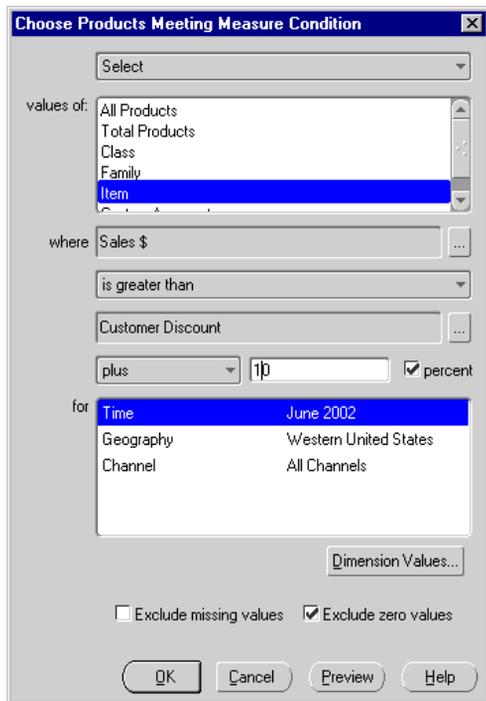
Selecting Top and Bottom Values

About selecting top and bottom values

You can specify a number or percentage of values that you want to select from the top, bottom, or top and bottom values for a measure. For example, in a Product dimension you might select the top ten products based on Sales for a specified geography and time period.

Procedure: Selecting top and bottom values

To select top and bottom values, follow these steps:

1. Do one of the following:

    ■ If you are working in an open document, click the **Select Data** button on the Document toolbar and choose a dimension from the popup menu.

    ■ If you are working within a custom aggregate or saved selection definition, choose a dimension in the Dimension box and click the **Selector** button.

    Result: The Select Data dialog box appears. The dimension that you chose appears in the Select values for box.

2. If the current dimension includes one or more hierarchies, in the Organize by box you can select the hierarchy that you want to work with.

    Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Top/Bottom Values** button on the toolbar.

    Result: The Select Top/Bottom *Values* dialog box appears for the dimension that you chose in Step 1.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

    ■ To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

    ■ To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

    ■ To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

    ■ To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. If you selected a hierarchy in the Organize by box, the *Level* box contains a levels for that hierarchy. Select one or more levels at which you want to choose values. Use CTRL+click or SHIFT+click to select more than one level.

6. In the *measure* box, specify the measure for which you want to select values.

   You can accept the default measure that appears in the box, or click the *Ellipsis* button to access a dialog box where you can select an alternate measure.

7. To include top values in your selection, in the *top* box, enter the number or percentage of top values to select. To indicate that the value that you entered is a percentage, choose **percent**.

8. To include bottom values in your selection, in the *bottom* box specify the number or percentage of bottom values to select. To indicate that the value that you entered is a percentage, choose **percent**.

9. The *Dimensions* box displays default qualifying dimension values for the top/bottom selections.

   You can accept the default values that appear in the box, or click the **Dimension Values** button to access a dialog box where you can select alternate values for one or more dimensions.

10. To exclude missing values, choose **Exclude missing values**. To exclude zero values, choose **Exclude zero values**.

11. You can choose **Preview** to preview the values that will be selected as a result of your choices.

12. Choose **OK**.

    Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

13. You can order values in the Selected box according to how you want your selections to appear.

    For more information, see "Ordering Selected Values" on page 17-32.

Example: Selecting top and bottom values

The following illustration shows the Choose Top/Bottom *Values* dialog box. In the example, the user selects customers where Units Sold is in the top 10% for all products and all geographies in June.
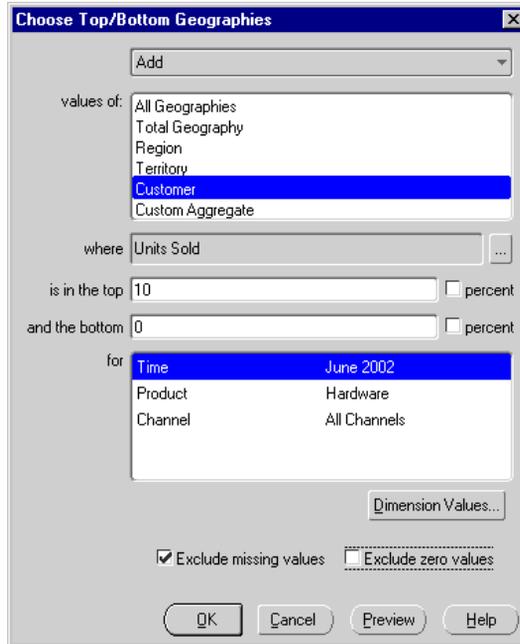
Selecting Time Values by Range

About selecting Time values by range

When selecting values for the Time dimension, you can specify a time range within which to limit value selections. For example, you might choose time values from January 2002 through June 2002 at the month level.

Procedure: Selecting values by time range

To select time values by range, follow these steps:

1. Do one of the following:

   ■ If you are working in an open document, click the **Select Data** button on the Document toolbar and choose **Time** from the popup menu.

   ■ If you are working within a custom aggregate or saved selection definition, choose **Time** in the Dimension box and click the **Selector** button.

   Result: The Select Data dialog box appears. Time appears in the Select values for box.

2. In the Organize by box you can select the time hierarchy that you want to work with.

   Result: The values in the Available box might change depending on which hierarchy you choose.

3. Click the **Choose Values by Range** button on the toolbar.

   Result: The Choose Time By Range dialog box appears.

4. In the *Action* box, specify how you want the new values that you are selecting to affect the values in the Selected box of the Select Data dialog box, as follows:

   ■ To replace any values that are already in the Selected box with just the values that you specify in this dialog box, choose **Select**.

   ■ To add the new values that you specify in this dialog box to any values that are already in the Selected box, choose **Add**.

   ■ To retain only the values already in the Selected box that match the values that you specify in this dialog box, choose **Keep**.

   ■ To remove the values that you specify in this dialog box from the values that are already in the Selected box, choose **Remove**.

5. In the *Interval* box, choose one of the following:

   ■ **a range of** — Selects all time values between and including a starting value and an ending value at a specified level.

   ■ **the latest** — Selects a specified number of the latest time values at a specified level.

   ■ **the next** — Selects a specified number of future time values at a specified level. This choice only appears if your database contains values for future time periods.

6. If you selected **a range of** in Step 5, proceed as follows:

   a. In the *Level* box, select the level at which you want to select time values.

   b. In the from box, specify the start of the range.

      You can accept the default value or click the *Ellipsis* button to access a dialog box, where you can select an alternate value.

   c. In the to box, specify the end of the range. You can accept the default value or click the *Ellipsis* button to access a dialog box, where you can select an alternate value.

      Alternatively, you can click **the latest** to specify that Analyzer use the latest time value at the level that you chose.

7. If you selected **the latest** in Step 5, proceed as follows:

   a. In the *value* box, enter the number of time periods to select.

   b. In the *Level* box, select the level at which you want to select time values.

8. If your database includes future time periods and you selected **the next** in Step 5, proceed as follows:

   a. In the *value* box, enter the number of future time periods to select.

   b. In the *Level* box, select the level at which you want to select future time values.

9. You can choose **Preview** to preview the values that will be selected as a result of your choices.

10. Choose **OK**.

   Result: The Select Data dialog box reappears. The values that you chose are displayed in the Selected box.

11. You can order values in the Selected box according to how you want your selections to appear.

   For more information, see .

Example: Selecting time values by range

The following illustration shows the Choose Time By Range dialog box. In the example, the user selects a range of time values at the month level.
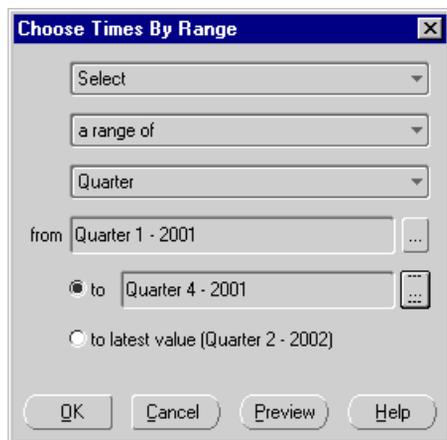
Ordering Selected Values

About ordering selected values

Once you have selected values, you can arrange them in the Selected box in the order in which you want them to appear in a document. You can use the following techniques to order values:

- Use the Sort tool on the Data Selection toolbar to specify sorting criteria.

- Drag and drop values to specific positions.

- Use right-click functions to change the relative position of a value or values.

Using the Sort tool to sort values

To use the Sort tool to sort values in the Selected box, follow these steps:

1. Click the **Sort** button on the Data Selection toolbar.

2. Select a sort option. Depending on the dimension and the type of measure, one or more of the following options are available:

   - **name** — Sorts values in alphabetical order by name. You can choose **A to Z** or **Z to A**.

   - **data value** — Sorts values numerically based on a specified measure and the qualifying dimension values for that measure. You can choose **high to low** or **low to high**.

   - **hierarchy** — Sorts values based on hierarchy. Child values are grouped by parent values. You can choose **top to bottom** or **bottom to top**.

   - **level** — Sorts values based on level. Child values are not grouped by parent values. You can choose **top to bottom** or **bottom to top**.

   - **time** — Sorts time values by time period. You can choose **earliest to latest** or **latest to earliest**.

3. To consider the case for a text measure, choose **Case Sensitive**.

4. You can choose the **Preview** button to preview the results.

5. Choose **OK**.

Procedure: Using drag and drop to order selected values

To use drag and drop to order values in the Selected box, click one or more values and drag them to a new position. As you move the selection, a black bar appears to help you identify the current position. When the black bar is under the desired location, release the selection.

Procedure: Using a right-click function to order selected values

To use a right-click function to order values in the Selected box, follow these steps:

1. In the Selected box, right-click the value whose position you want to change. Use CTRL+click or SHIFT+click to select multiple values.

    Result: A popup menu appears, listing options for changing the position. The options vary depending on the current position of the value.

2. Choose the option that specifies how you want to position the value:

    -   To place the selection first in the list, choose **Move to top**.

    -   To place the selection last in the list, choose **Move to bottom**

    -   To place the selection below another value in the list, choose **Move below**, choose the target value, and then choose **OK**.

    You can also choose **Remove** to remove the selected value from the selected list.

Saving Selected Values

About saving value selections

You can save the values that you have selected for a dimension as a *saved selection* of values. A saved selection is a set of dimension values that you select once and save to use again in other documents. Saved selections are useful when you want to quickly retrieve a group of values without repeating the steps that you followed to select them. Selections that are saved as steps (for example, "the top ten products based on Sales in geographies *x*, *y*, and *z* during the previous quarter") also provide the ability to dynamically update your analyses.

Procedure: Saving values as a custom saved selection

To select values and save them as a saved selection, follow these steps:

1. With the document open in the workspace, click the **Select Data** button on the Document toolbar.

2. From the drop-down list, select a dimension.

    Result: The Select Data dialog box appears, displaying values for the dimension.

3. In the Select Data dialog box, select a set of values.

    You can select values from a list, or you can use the buttons on the Data Selection toolbar to select and sort values by specific criteria. For information about selecting and sorting values, see Chapter 17.

4. Click the **Save Current Selection** button on the toolbar.

    Result: The Save a Selection for *Dimension* dialog box appears.

5. In the Save a Selection for *Dimension* dialog box, enter information for the saved selection as follows:

    a. In the Save current selection as box, enter a name for the saved selection (up to 70 characters).

    b. In the Description box, you can enter optional text to describe the saved selection.

    c. Specify how you want the selection to be saved:

        *   **Save steps** — Saves the steps that you followed to select the values
        *   **Save members** — Saves the actual dimension values

    For information about these options, see "About defining saved selections" on page 16-16.

    Note: If you used the drag and drop method or a right-click function to sort values for the selection, then you will not be able to save steps.

6. Choose **OK** to save the selection.

18

Managing Objects in the Web Environment

Chapter summary

This chapter describes how to use document folders and Oracle Sales Analyzer's library and publishing capabilities to manage and share documents and other objects in the Web environment.

List of topics

This chapter includes the following topics:

- Using Folders
- Creating and Populating Folders
- Maintaining Folders
- Working with Personal Folders in the Navigation List
- Using Publishing to Share Objects

Using Folders

Personal folders organize your documents

You can use folders to organize your reports, graphs, and forecasts. You can populate a folder with previously saved documents. You can also add documents to a folder, delete documents from a folder, copy and move documents between folders, and change the position of documents in folders.

Difference between personal folders and other folders in the navigation list

The folders that you create to manage your documents are *personal* folders. You can create, populate, rename, and delete these folders as needed. As you create a new folder, it is displayed in the navigation list.

You might also see public folders in your navigation list. Public folders contain documents that have been created by an administrator or another authorized user and published to a library to which you have access. You can use documents that are in public folders but you cannot delete documents from a public folder, rename a public folder, or delete a public folder.

You will also see system folders for custom measures, custom aggregates, and saved selections in your navigation list. Depending on how your system has been set up by the DBA, you might also see system folders for Analysis Library documents. These folders are not under your control. You cannot create new system folders, delete system folders, or rename system folders.

How personal documents and folders are stored

Personal documents are stored independently of folders in the database. You can copy the same document to more than one personal folder. You can also delete a document from one personal folder while it remains in another personal folder. Although a document can exist in more than one folder, it cannot exist in a personal folder *and* the main Documents folder.

Example: Personal folders

Personal folders are grouped together in the navigation list. The following illustration shows a personal folder, Q1 2002, that contains personal documents. Note that the icon for this folder differs from the icons for Key Documents and Presentations, which are public folders.
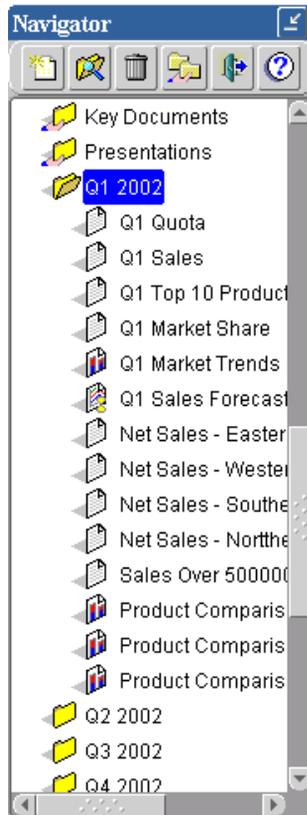
Creating and Populating Folders

Procedure: Creating a folder

To create a new folder, follow these steps:

1. On the Navigator toolbar, click the **New** button,

   and choose **New Folder** from the popup menu.

   Alternatively, you can right-click **Documents** in the navigation list and choose **New Folder** from the popup menu.

   Result: The New Folder dialog box appears.

2. Enter a name for the folder (up to 70 characters) and choose **OK**.

What happens when you create a folder?

The new folder is displayed as a personal object in the navigation list. The folder also displays as one of the folders into which you can save a document.
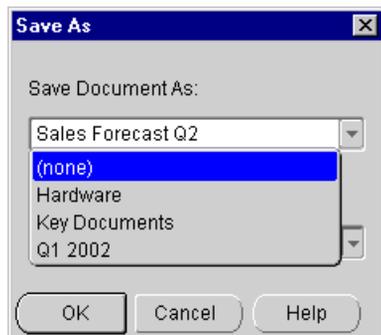
Maintaining Folders

Moving personal documents between folders

You can move a personal document from one folder to another in the navigation list.

You can use the following methods to move documents between folders in the navigation list:

- Drag and drop — Select one or more documents, drag the selection to the new location, and release the mouse.

- Popup menu commands — Right-click one or more documents, choose **Cut**, navigate to the new location, and then choose **Paste**.

- Keyboard shortcuts — Select one or more documents, press CTRL+x, navigate to the new location, and press CTRL+v.

Copying personal document to folders

You can copy a personal document to one or more personal folders in the navigation list. However, you cannot copy documents to or from the main Documents folder. If you attempt to do so, the documents will be moved rather than copied.

You can use the following methods to copy documents in the navigation list:

- Drag and drop — Press the CTRL key and click one or more documents, drag the selection to the new location, and release the mouse.

- Popup menu commands — Right-click one or more documents, choose **Copy**, navigate to the new location, and then choose **Paste**.

- Keyboard shortcuts — Select one or more documents, press CTRL+c, navigate to the new location, and press CTRL+v.

Changing the order of personal documents in a folder

You can change the current order of documents in a personal folder by dragging a document from its current position to a new position. Proceed as follows:

1. Open the folder.

2. Select one or more documents.

3. Drag the selection to a new location in the folder. As you move the object or objects, a black bar appears to help you identify the new position.

4. When the black bar is below the desired position, release the selection.

Note: You cannot change the order of documents in the main Documents folder

Deleting a personal document from a folder

To delete a personal document from a folder, open the folder, select the document, and click the **Delete** button on the Navigator toolbar.

Alternatively, you can right-click the document and choose **Delete** from the popup menu.

In either case, Analyzer prompts you to confirm the deletion.

Note: The document is deleted from the specified folder. If there is a copy of the document in another folder, the copy is not deleted.

Procedure: Deleting multiple personal documents from a folder

To delete more than one personal document from one or more folders, follow these steps:

1. Open the folders that contain the documents that you want to delete.

2. In the navigation list, scroll to a personal document that you want to delete. Press the CTRL key and simultaneously click the object.

   Result: The document is highlighted.

3. Repeat the previous procedure for each personal document that you want to delete.

4. After you make your final selection, right-click and choose **Delete** from the popup menu.

   Result: Analyzer prompts you to confirm the deletion.

Working with Personal Folders in the Navigation List

Navigation list functions for folders

You can use the navigation list to create new folders and move and copy documents between folders. In addition, you can perform the following functions:

- Rename a personal folder

- View the object properties of a folder

- Delete one or more personal folders

Procedure: Renaming a personal folder

To rename a folder, right-click the folder and choose **Rename** from the popup menu. Then type the new name.

Procedure: Viewing folder properties

To view the object properties of a folder, right-click the object in the navigation list and choose **Properties** from the popup menu.

The following information is displayed:

- Name

- Created

- Modified

- Class

Procedure: Deleting a personal folder

Note: When you delete a personal folder, all of the documents that it contains will also be deleted. If there is a copy of a document in another folder, that copy will not be deleted.

To delete a personal folder, click the folder and click the **Delete** button on the Navigator toolbar.

Alternatively, you can right-click the folder and choose **Delete** from the popup menu.

In either case, Analyzer prompts you to confirm the deletion.

Procedure: Deleting more than one personal folder

Note: When you delete a personal folder, all of the documents that it contains will also be deleted. If there is a version of a document in another folder, that version will not be deleted.

To delete more than one personal folder, follow these steps:

1. In the navigation list, scroll to a personal folder that you want to delete. Press the CTRL key and simultaneously click the object.

    Result: The folder is highlighted.

2. Repeat the previous procedure for each personal folder that you want to delete.

3. After you make your final selection, right-click and choose **Delete** from the popup menu.

    Result: Analyzer prompts you to confirm the deletion.

Publishing folders

You can share your folders and the documents that they contain with other users by publishing them to a public library to which you have read/write access. For more information, see "Using Publishing to Share Objects" on page 18-9.

Using Publishing to Share Objects

How Analyzer handles personal and public objects

Documents, folders, and other personal objects that you create and save are stored in your personal database. You have automatic read-write access to this database and to the *private library* that contains the saved objects. You can share these personal objects with other users by publishing them to a public library to which you have read/write access.

As the DBA and other users *publish* personal objects to public libraries to which you have access, the shared objects appear as public objects in your navigation list. You have read access to these objects. You can use them as they are, or you can publish them to your private library, where you can make modifications and save them as personal objects.

When to publish a personal object to a public library

Publish a personal object to a public library when you want to share the object with other users. In order to publish the object to a public library, you must have write access to that library.

When you publish an object that references another object, such as document that includes a custom aggregate, custom measure, or saved selection, you can choose to publish the related objects. If you publish a saved selection that consists of steps, but your access to the database is limited (scoped) in the dimension for the saved selection, Analyzer will publish the saved selection as a list.

Consult your Administrator regarding library access and scoping limitations.

What happens when you publish a personal object to a public library?

When you publish a personal object to a public library, the object still exists in your personal database and retains the PERSONAL Class property and other characteristics of a personal object. If you delete the personal object but do not delete the public version, the public copy will appear in the place of the personal copy in the navigation list. The public copy will also be used in any custom objects which referred to the personal version.

If you publish a personal object to a public library and later modify the personal version of the object, the modification is saved in your personal database. If you want the public version to reflect your changes, you must publish the object again.

When to publish an object from a public library to your private library

Publish an object from a public library to your private library when you want to modify the object and save your modifications. For example, if you want to edit the definition of a public saved selection, custom aggregate, or custom measure you must publish it to your private library before you can make changes.

When you publish an object that references another object, such as document that includes a custom aggregate, custom measure, or saved selection, you can choose to publish the related objects. If you are publish a saved selection that consists of steps, but your access to the database is limited (scoped) in the dimension for the saved selection, Analyzer will publish the saved selection as a list.

What happens when you publish an object from a public library to your private library?

Publishing a public object to your private library changes the Class property of the object to PERSONAL, and sets permissions to read/write. You can then modify the object.

What objects can you publish?

You can publish the following objects:

- Custom aggregates

- Custom measures

- Saved selections

- Folders (includes all documents in the folder)

- Graphs

- Reports

- Forecasts

- Data Cubes

- Slices

Procedure: Publishing objects between libraries

To publish an object from one library to another, follow these steps.

1. On the Navigator toolbar, click the **Maintain Libraries** button.

   Result: The Maintain Libraries dialog box appears.

2. In the Catalog box, select the catalog that contains the object that you want to publish. For example, if you want to publish a document, select the Document catalog.

3. In a Location box, specify the source location (PUBLIC or PERSONAL).

4. In the other Location box, choose the destination location (PUBLIC or PERSONAL).

5. In a Library box, select the source library.

   Result: A list of objects in the library is displayed in the Entries box.

6. In the other Library box, select the destination library.

7. In the Entries box for the source library, select the objects that you want to publish.

8. Choose the appropriate Copy button (> or <) to publish the selected objects from the source to the destination.

   Note: Copy buttons are enabled if you have the access rights to publish from the source to the destination.

9. To include related custom objects in the publishing process, click the **Related Objects** box.

   For example, if you select this option when you publish a document, Analyzer will also publish custom measures, custom aggregates, and saved selections that are associated with the document.

10. Choose **Close** to exit.

Example: Publishing objects to a public library

The following illustration shows an object in the Document catalog being published from the PRIVATE library in the PERSONAL location to the MASTER library in the PUBLIC location. The user has opted to publish related objects.
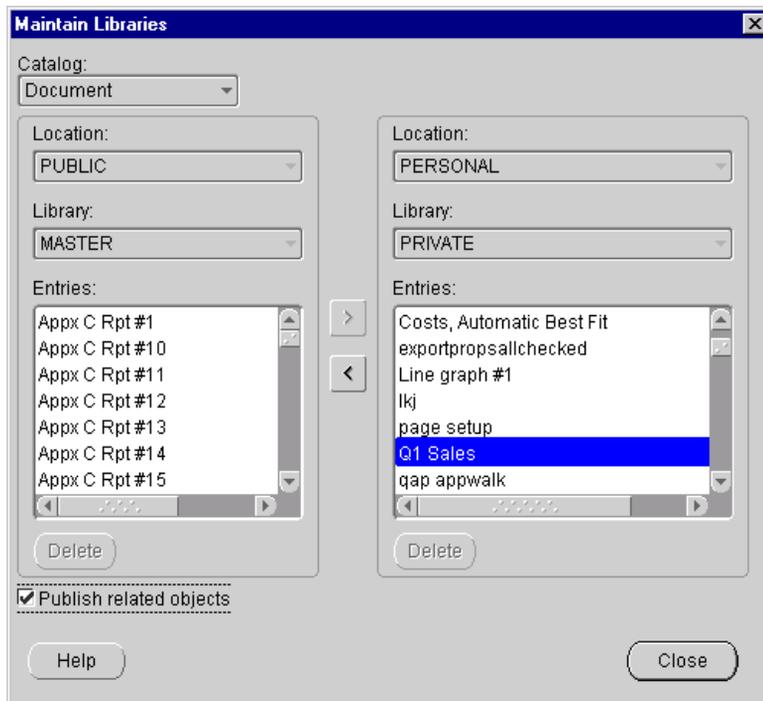
Example: Publishing objects to a personal library

The following illustration shows an object in the Document catalog being published from the MASTER library in the PUBLIC location to the PRIVATE library in the PERSONAL location. The user has opted to publish related objects.
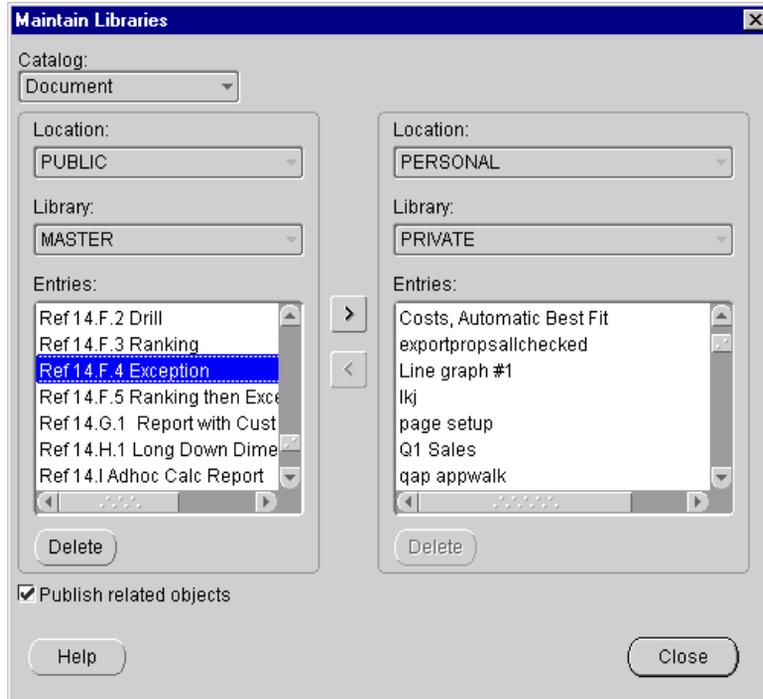
Removing published objects from a public library

You can remove any object that you have published to a public library from that library. If the object is in more than one library, you must remove it separately from each library. If you remove a folder that you published and a document that it contains does not exist in another folder, the folder will be deleted and the document will appear in the main Documents folder.

Procedure: Removing an object from a public library

To remove an object from a public library, follow these steps.

1. On the Navigator toolbar, click the **Maintain Libraries** button.

    Result: The Maintain Libraries dialog box appears.

2. In the Catalog box, select the catalog that contains the object that you want to remove.

3. In the Library box for the PUBLIC location, select the library that contains the object that you want to remove.

    Result: A list of objects in the library is displayed in the Entries box.

4. In the Entries box, select objects to remove

5. Choose **Delete** to remove the objects from the library.

    Note: The **Delete** button is only enabled if you have the required access rights to delete the object.

6. Choose **Close** to exit.

A

Forecasting Algorithms

Appendix summary

This appendix describes the methodology behind each of the eight forecasting methods that Analyzer offers.

List of topics

This appendix includes the following topics:

- Express-Based Methods
- Exponential Smoothing Methods

Express-Based Methods

Holt-Winters, Exponential Trend, and Linear Trend

Forecasts that are created using the Holt-Winters, Exponential Trend, and Linear Trend methods use the Express FORECAST command.

Moving Average

The Moving Average method uses the Express MOVINGAVERAGE function, whose syntax is as follows.

MOVINGAVERAGE(expression, start, stop, step, [dim1])

The Forecast Wizard allows you to enter the start (lag) and stop (lead) parameters. The step parameter is always 1. As an example, to set up a moving average forecast with a lag value of 2 and a lead value of 1, the Forecast Wizard would use the following Express command:

MOVINGAVERAGE(expression, -2, 1, 1, [dim1])

In the following table, a lead of 2 and a lag of 1 calculates a 4-period moving average. Each forecast value is determined by averaging the two previous periods' measure values, the current measure value, and the next period's measure value.

Time	Measure Value	Forecast Value (Lag 2, Lead 1)
January 1998	300	350 = average(300+400)
February 1998	400	267 = average(300+400+100)
March 1998	100	250 = average(300+400+100+200)
April 1998	200	300 = average(400+100+200+500)
May 1998	500	267 = average(100+200+500)
June 1998	-	350 = average(200+500)
July 1998	-	500 = average(500)

Notice that the moving average method will calculate a forecast value as long as there is some data to draw on. For example, in January 1998, there are no prior periods, so the forecast value is based only on the current period's measure value and the next period's measure value.

Note: It is the *lag* value that determines how far forward the forecast will be calculated. That is, a lag value of 2 will forecast 2 periods into the future, whereas a lag value of 5 will forecast 5 periods into the future.

Percentage Change

The Percentage Change method uses the Express LAG and LAGABSPCT functions to determine the percentage differences between a measure's values during the supporting data time period. Then, these percentages are applied to the forecast data time period.

You must enter the number of time periods to lag when calculating the percentage difference.

For example, if your supporting data time period is 1995 though 1997, and you are forecasting 1998 and 1999 with a lag of 1 period, the results might look like the ones in the following table.

Time	Measure Value	Percentage Change	Forecast Value
1995	100	-	-
1996	120	+20% (= 120-100 ⁄ 100)	-
1997	170	+41.7% (=170-120 ⁄ 120)	-
1998	-	-	204 (= 170 + 20%)
1999	-	-	289 (= 024 + 41.7%)

By applying the percentage changes (+20% and +41.7%) to the last measure value (170), forecast values can be calculated for 1998 and 1999.

Related information

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting Methods"

For more information on the Express FORECAST command or the MOVINGAVERAGE, LAG, or LAGABSPCT functions, refer to the *Oracle Express Language Reference Manual.*

Exponential Smoothing Methods

Overview

The three smoothing methods Analyzer offers each require only a single parameter, the smoothing constant a.

In the equations below, the following symbols are used:

F = the forecast value
t = time
M = the original measure value
n = the number of periods ahead to forecast

Single Exponential Smoothing

The Single Exponential Smoothing method uses a simple equation that has been in use for many years. The forecast value for time t+1 equals a times the measure value at time t, plus the forecast value for time t multiplied by 1 minus a.

Ft+1 = aMt + (1 - a)Ft

For example, if a is 0.3, Mt = 500, and Ft = 550, then the equation is as follows.

Ft+1 = (0.3 x 500) + (0.7 x 550)
Ft+1 = 150 + 385
Ft+1 = 535

Double Exponential Smoothing

In the case of Double Exponential Smoothing, the smoothing process is repeated, and then additional equations are needed to derive a linear estimate. This procedure is also known as *Brown's One Parameter Linear Exponential Smoothing* (see "Related information" at the end of this topic for further information).

The following table shows the equations that are used to calculate a forecast using Double Exponential Smoothing.

Equation	Description
F't = aMt + (1 - a)F't-1	Single exponentially smoothed series
F"t = aF't + (1 - a)F"t-1	Double exponentially smoothed series
"at = 2F't - Ft "	Intercept
"bt = a/1-a (F't - Ft)"	Linear trend
Ft+n = at + bt n	Forecast

Triple Exponential Smoothing

For Triple Exponential Smoothing, the data is smoothed three times, and then a quadratic estimate is derived. This procedure is also known as *Brown's One Parameter Quadratic Exponential Smoothing* (see "Related information").

The following table shows the equations that are used to calculate a forecast using Triple Exponential Smoothing.

Equation	Description
F't = aMt + (1 - a)F't-1	Single exponentially smoothed series
F"t = aF't + (1 - a)F"t-1	Double exponentially smoothed series
"F'''t = aFt + (1 - a)F'''t-1"	Triple exponentially smoothed series
"at = 3F't - 3Ft + F'''t-1 "	Intercept
"bt = a/2(1-a)2 ((6 - 5a)F't - (10 - 8a)Ft + (4 - 3a)F'''t)"	Linear trend
"ct = a2/(1-a)2 (F't - 2Ft + F'''t)"	Quadratic trend
Ft+n = at + bt n + 1/2 ct n2	Forecast

Related information

Search for the following topics in the Analyzer Help system:

"Creating Forecasts"
"Overview of Forecasting Methods"

For detailed information on the exponential smoothing algorithms presented here, refer to:

Makridakis, S. and Wheelwright, S., *Forecasting Methods for Management*, John Wiley & Sons, 1977
Bowerman, B. and O'Connell, T., *Forecasting Time Series*, Duxbury Press, 1979

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