# Oracle® Financial Analyzer

User's Guide

Release 11*i*

April 2002
Part No. A96138-01

ORACLE®

# Contents

## 3   Dimensions and Dimension Values

## 4   Financial Data Items

## 5   Hierarchies

## 6   Attributes

## 7   Selecting Data

# 8 Modeling Data

# 9 Solving Data

# 10 Transferring Structures and Data

# 11 Task Processing

# 12 Managing User Access

## 13 Reports

## 14 Graphs

## 15 Worksheets

# 16    Data Entry Forms

# 17    Folders

# 18    The Financial Analyzer Web Interface

# 19    Working with Web Reports and Graphs

## 20 Formatting Web Reports and Graphs

## 21 Working with Web Data Entry Forms

## 22 Express Spreadsheet Add-In

# Glossary

# Index

x

# Send Us Your Comments

**Oracle Financial Analyzer User's Guide, Release 6.3**

**Part No. A68144-01**

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 Financial Analyzer
- Postal service:
  OLAP Products Documentation Manager
  Oracle Corporation
  Oracle Financial Analyzer Docuentation
  10 Van de Graaff Drive
  Burlington, MA 01803
  USA

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.

# Preface

## What this manual is about

The *Oracle Financial Analyzer User's Guide* describes the Oracle®Financial Analyzer (hereinafter referred to as "Financial Analyzer") user environment and provides information about database maintenance and document tasks. This guide is meant to be used as a companion to the Help system. Conceptual information and examples are included here; procedural information is included in Help. Throughout this guide you will find many references to specific Help topics.

## Intended audience

Most of information in this guide is intended for users of Budget, Analyst, and Administrator workstations who are operating in the Microsoft Windows environment. Chapter 18 through Chapter 21 provides information for individuals who are using the Financial Analyzer Web interface.

## Structure of this document

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

- Chapter 1 describes the Financial Analyzer workstations and provides configuration information.

- Chapter 2 describes Financial Analyzer menus and components.

- Chapter 3 describes dimensions and dimension values, which are used to describe and structure data.

- Chapter 4 describes financial data items, which are used to store and calculate financial data.

- Chapter 5 describes how you can create and use hierarchies.

- Chapter 6 describes how to create and work with attributes.

- Chapter 7 describes how to use the Selector.

- Chapter 8 describes how to create and use models.

- Chapter 9 describes how to solve data.

- Chapter 10 describes how data and structures are transferred throughout the Financial Analyzer system.

- Chapter 11 describes the features of the Task Processor and Task Queue, which manage information that is written to the shared database.

- Chapter 12 describes the tasks that administrators must perform to set up and maintain system users.

- Chapter 13 describes reports and explains how to create, edit, and maintain them.

- Chapter 14 describes graphs and explains how to create, edit, and maintain them.

- Chapter 15 describes worksheets and explains how to create, edit, and maintain them.

- Chapter 16 describes data entry forms and explains how to create, edit, and maintain them.

- Chapter 17 describes folders and explains how to manage them.

- Chapter 18 describes how to use the Web interface to access, navigate, and exit Financial Analyzer with a browser.

- Chapter 19 describes how to work with Web reports and graphs.

- Chapter 20 describes how you can format Web reports and graphs.

- Chapter 21describes how to use Web data entry forms to enter and submit data to the shared database.

- Chapter 22 describes the Express Spreadsheet Add-In and explains how to use it with Financial Analyzer.

- Chapter 23 describes how to use the data loader feature.

- A glossary provides definitions for commonly used terms.

# Financial Analyzer Documentation

## Documentation set

This manual is part of a set of documentation, which also includes the following documents:

- *Oracle Financial Analyzer  Installation and Upgrade Guide* — Describes how to install Financial Analyzer and upgrade an existing installation.

- *Oracle Financial Analyzer Application Programming Interface: Structure and Supporting Meta Data Guide* — Describes how advanced users who are responsible for implementing the system can use custom programs to maintain Financial Analyzer structures and supporting metadata.

- *Integrating Oracle Financial Analyzer with Oracle General Ledger 11* — Describes how to integrate Financial Analyzer with Oracle General Ledger.

- *Hooks in the Oracle Financial Analyzer Application Interface* — A technical note that describes worksheet hooks.

## Help files

An online Help system provides procedural and reference information for both system administrators and general users in the Windows client environment.

An HTML Help system provides procedural and reference information for users of the Financial Analyzer web interface.

# 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.<br><br>Bold text is also used for notes and other secondary information in tables (for example, **Result**). |
| `Fixed-width` text | Indicates folder names, file names, operating system commands, and URLs. Also indicates examples and anything that you must type exactly as it appears.<br><br>**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.<br><br>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. |
| | **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. |
| | **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. |

## Documentation Accessibility

Oracle's goal is to make our products, services, and supporting documentation accessible to the disabled community with good usability. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information, visit the Oracle Accessibility Program web site at `http://www.oracle.com/accessibility/`.

# 1

# Introducing Financial Analyzer

## Chapter summary

This chapter describes Oracle® Financial Analyzer) workstations and provides configuration information.

## Who should read this chapter

You need to know the information in this chapter if you are:

- A system administrator

- A Budget or Analyst workstation user who wants to know how their workstation fits into the Financial Analyzer environment

## List of topics

This chapter includes the following topics:

- About Financial Analyzer

- Super Administrator Workstations

- Administrator Workstations

- Task Processor Workstation

- Budget Workstations

- Analyst Workstations

- Example: Workstations in a Typical Corporate Environment

- Comparison of Workstation Types
- Typical Financial Analyzer Configurations
- External Users

# About Financial Analyzer

## Definition: Financial Analyzer

Financial Analyzer is a distributed software application that you can use to:

- Report and analyze corporate financial data and create financial budgets, forecasts, and plans
- Create and run financial models
- Configure an efficient and convenient financial system for your business

Financial Analyzer runs on a combination of networked personal computers and servers. A variety of software modules, known as *workstations,* are installed on the personal computers and servers and are set up to access common databases, called *shared* databases. These shared databases contain data and structures that are used throughout the Financial Analyzer system.

If Web listener software has been installed and configured on the server, Financial Analyzer reports, graphs, and data entry forms can also be accessed through a Web browser.

## Types of workstations

The Financial Analyzer environment includes two basic types of workstations, *administrator workstations* and *user workstations.*

The following types of administrator workstations are supported:

- Super administrator workstation
- Administrator workstations
- Task Processor workstations

The following types of user workstations are supported:

- Budget workstations
- Analyst workstations

## Types of databases

The following table describes the types of databases that can be associated with Financial Analyzer workstations.

| Database | Description |
|----------|-------------|
| Personal | Personal databases are used to store objects, and on some types of workstations, financial data. Objects include dimensions, financial data items, attributes, and hierarchies, as well as documents such as reports, worksheets and graphs. |
| Shared | The shared database contains financial data and objects that are shared by all users. Shared databases are maintained by administrators. |

## Tiered system design

Using the Super administrator workstation as the starting point, you can build a tiered architecture by creating subordinate administrator workstations, which can in turn be used to create other subordinate administrator workstations.

This tiered approach to system design reduces the size and complexity of the top-level structures and permits greater autonomy and control at lower-level and remote sites.

# Super Administrator Workstations

## Definition: Super administrator workstation

A Super administrator workstation enables the administrator at the highest level to perform the following functions:

- Define database structures and documents for system-wide use

- Control subordinate administrators' and users' access to financial data

- Process tasks submitted by users to update the Super administrator's shared database

## Location in a tiered environment

The Super administrator workstation is located at the top level of any Financial Analyzer environment. Only one Super administrator workstation can exist in a given system.

## Associated databases

Super administrator workstations are associated with a Super shared database, a personal database, and a Task Processor. The following illustration shows how a typical Super administrator workstation is configured.
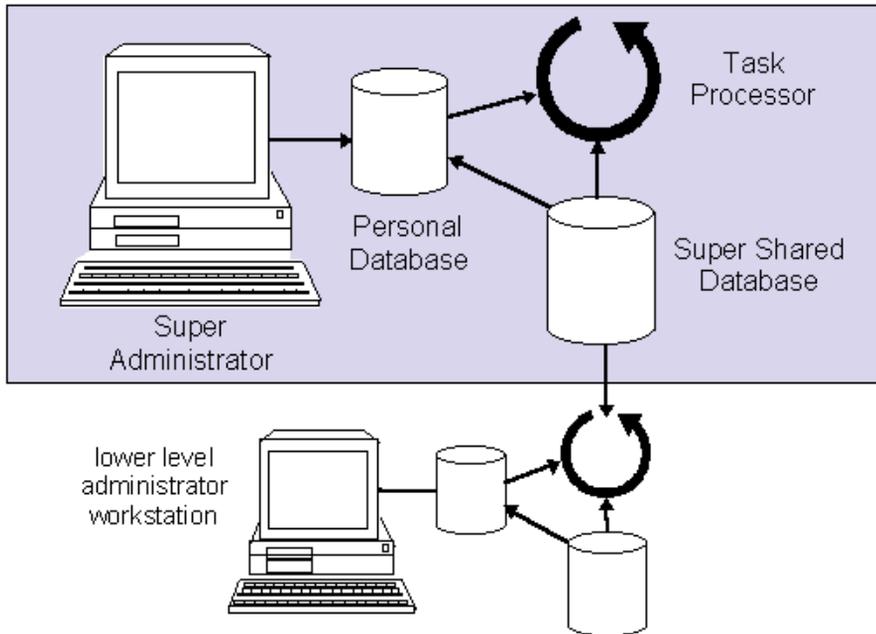


# Administrator Workstations

## Definition: Administrator workstation

The Administrator workstation is a system management and data access tool that enables you to perform the following tasks:

- Define and maintain users of Budget, Analyst, and subordinate Administrator workstations.

- Specify the default configuration for Budget, Analyst, and subordinate Administrator workstations when you create them.

- Restrict changes to shared data by controlling user access to the financial data in the shared database.

- Define database structures and distribute them to the shared database, subordinate Administrator workstations, Budget workstations, and Analyst workstations.

- Distribute slices of financial data to users and the shared database.

- Refresh the shared database that you maintain with data distributed from your superior administrator.

- Submit financial data from the shared database that you maintain to your superior administrator's shared database. (Note that super administrators cannot perform this task because by definition they are at the highest level in the reporting structure.)

## Location in a tiered architecture

Multiple Administrator workstations can exist at various levels of an environment that is set up in a tiered configuration. Each Administrator workstation is associated with its own shared database.

## Associated databases

Administrator workstations are associated with a shared database and a Task Processor. The following illustration shows how a typical Administrator workstation is configured.
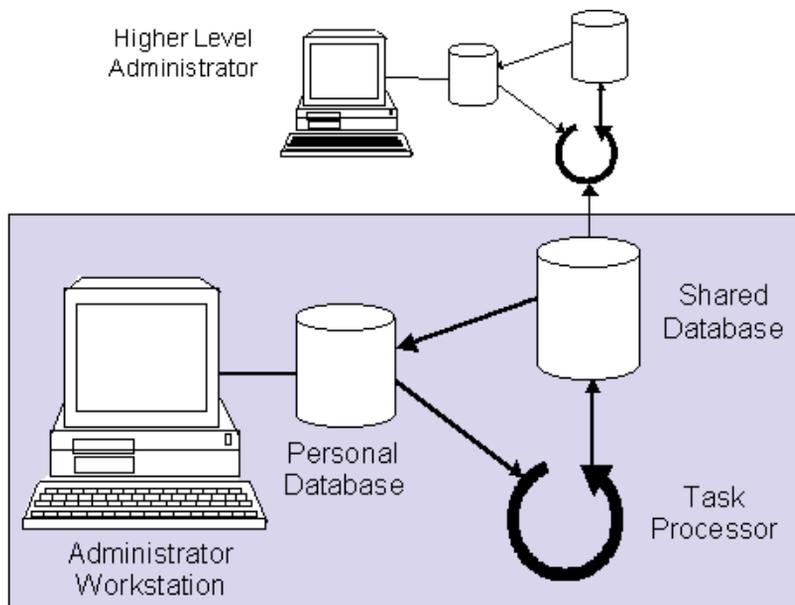


# Task Processor Workstation

## Definition: Task Processor workstation

A Task Processor workstation is a queue management tool that has the following characteristics:

- It is associated with each Administrator workstation in an Financial Analyzer system

- It enables administrators to monitor and control the transfer of data between user workstations and their associated shared databases

- It enables administrators to manage distribution of structures to subordinate workstations

## Methods of running a Task Processor

Although all tasks are actually processed on the server, a Task Processor can be set up:

- As a separate software component on the computer where an Administrator workstation runs

- On a separate computer that is dedicated to task processing

- To run directly on a server as a background task

When the Task Processor workstation is installed as a stand-alone workstation on a dedicated PC or server, tasks can be processed without interruption.

## Administrator workstation Task Processor

The following illustration shows how a Task Processor workstation can be installed on the same PC as an Administrator workstation.
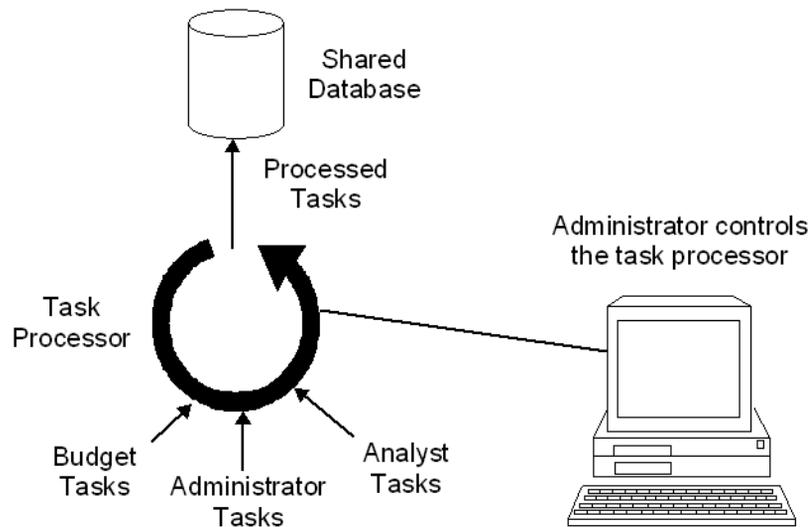
## Stand-alone Task Processor

The following illustration shows a Task Processor workstation that is set up to run on a separate computer that is dedicated to task processing.
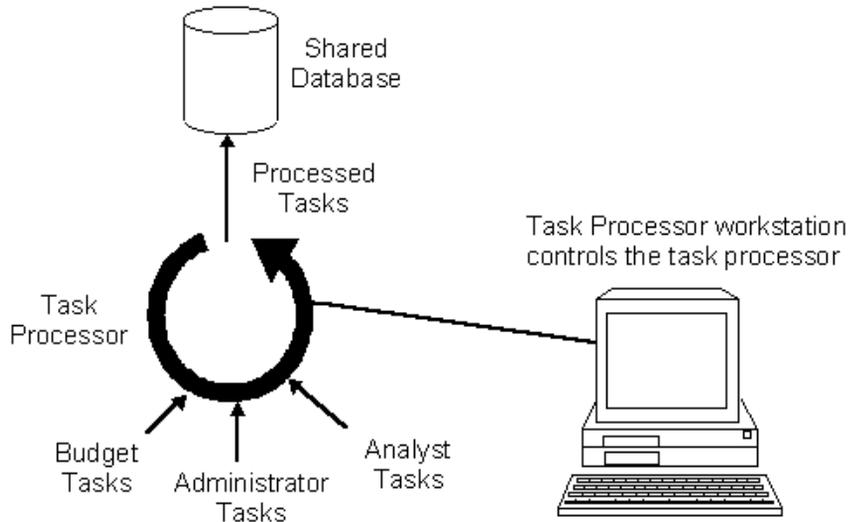


## Related information

For more information about the Task Processor, see Chapter 11.

# Budget Workstations

## Definition: Budget workstation

A Budget workstation is a data access tool that enables you to perform the following tasks:

- Define and maintain personal database objects such as dimensions, attributes, hierarchies, models, solve definitions, and group solve definitions

- Create and maintain personal reports, graphs, worksheets, and folders

- Use administrator defined database objects and documents

- Submit financial data from the personal database to the Administrator workstation's shared database

- Refresh the personal database with data from the Administrator workstation's shared database

## Location in a tiered architecture

In a tiered structure, a Budget workstation is located beneath the Administrator workstation that created it and is associated with a personal database that contains database structures, settings, and financial data.

Multiple Budget workstations can exist beneath the same Administrator workstation. In a tiered configuration, multiple Budget workstations can also exist at multiple levels of the configuration.

## How Budget workstations communicate with the shared database

The following illustration shows how Budget workstations communicate with the shared database through the Task Processor.
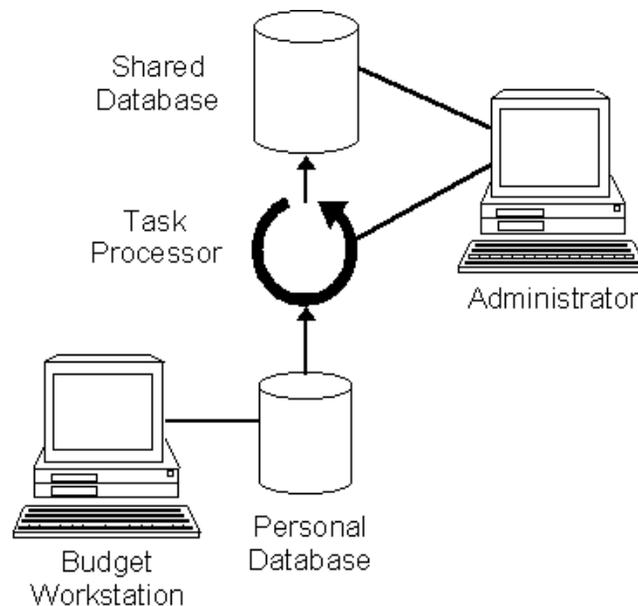
# Analyst Workstations

## Definition: Analyst workstation

An Analyst workstation is a data access tool that enables you to perform the following tasks:

- Refresh structures distributed by the Administrator workstation

- Define and use personal reports, graphs, worksheets, and folders or use administrator defined documents

- Access and manipulate data associated with dimensions, dimension values, time, attributes, hierarchies, and models in the shared database

## Location in a tiered architecture

In a tiered structure, an Analyst workstation is located beneath the Administrator workstation that created it and is associated with a personal database that contains database structures and settings but no personal copy of financial data.

## How Analyst workstations communicate with the shared database

The following illustration shows how Analyst workstations communicate with the shared database through the Task Processor.
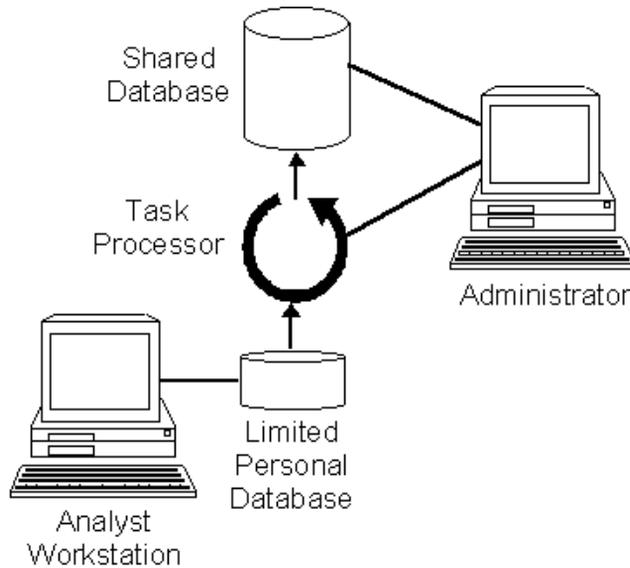


Note that when viewing data, the Analyst workstation communicates directly with the shared database, and does not go through the Task Processor.

# Example: Workstations in a Typical Corporate Environment

## Introduction

In a typical corporation, there are many different ways that Financial Analyzer can be configured and utilized. The following sections describe several divisions of a fictitious corporation and how they each use Financial Analyzer.

## Consulting division

In the consulting division, regional Consulting Managers use Budget workstations that report into the Sub Administrator workstation of the Consulting VP. Consulting Managers can:

- Edit the expense and revenue line items of their region.

- View the expense and revenue line items of other regional Consulting Managers. This facilitates Consulting Managers inputting their budget and forecast numbers based on trends in their particular regions.

- Perform what-if analysis to evaluate the potential performance based on the probability of the variable environment factors occurring.

- Augment their personal database by adding financial and personnel data which is not present in the data set distributed to them from the Administrator (which is sourced primarily from Oracle General Ledger).

When budgets or forecasts are completed, Consulting Managers submit their final numbers to the Consulting VP who reviews them and requests revisions if necessary. The Consulting VP may also make edits to the shared data which become the final budget. The lower level Budget workstations Consulting Managers then refresh their personal databases to get the finalized figures. The Consulting VP submits final summary consulting P&L budgets and forecasts to a Senior Financial Analyst in Corporate Finance who runs the Super administrator workstation.

The following illustration shows the Consulting Division.
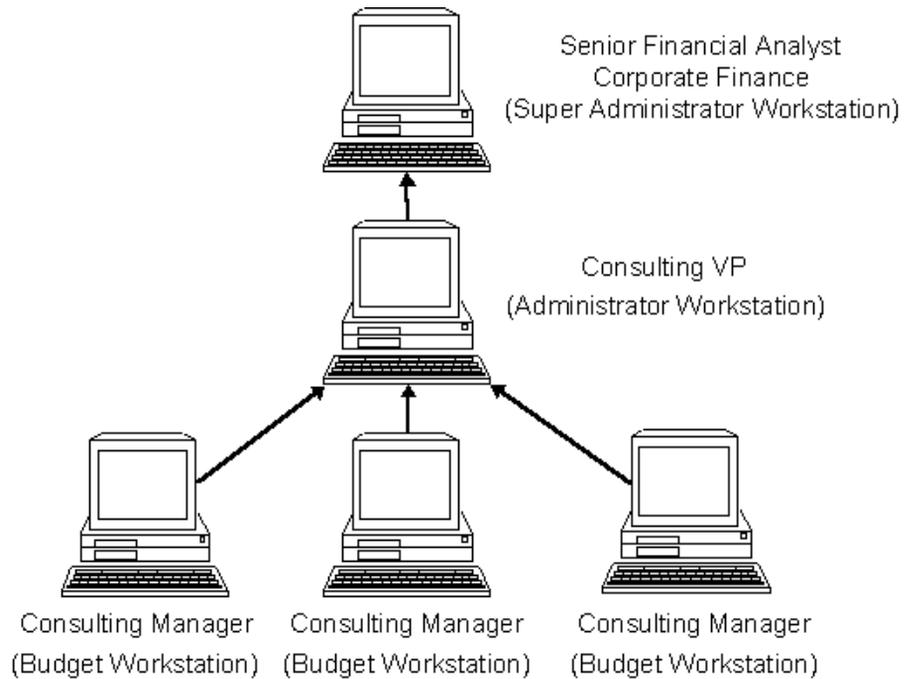


## Manufacturing

In the manufacturing environment, Product Managers:

- Follow an organization similar to the Consulting Managers, except that what they can view and edit is determined by their product responsibilities rather than by their geographic region.

- Utilize Financial Analyzer Budget workstations to budget and forecast and perform in-depth analyses such as product profitability, customer profitability, trend analysis, what-if analysis, and production forecasting.

- Submit forecasts and budgets to the Production VP or directly to a Financial Analyst in Corporate Finance.

Some product managers are provided with Analyst workstations to keep current on company performance and to support production line decisions. These Analyst workstation users view the historic, budget, and current forecast data to properly

plan and execute to the budget/forecast. Their view of the data is also very product-focused. They do not need to perform analysis or provide budget or forecast data. They use the finalized corporate data for ongoing decision making and planning; therefore, the functionality of the Analyst workstation suits their needs.

The following illustration shows the manufacturing division.
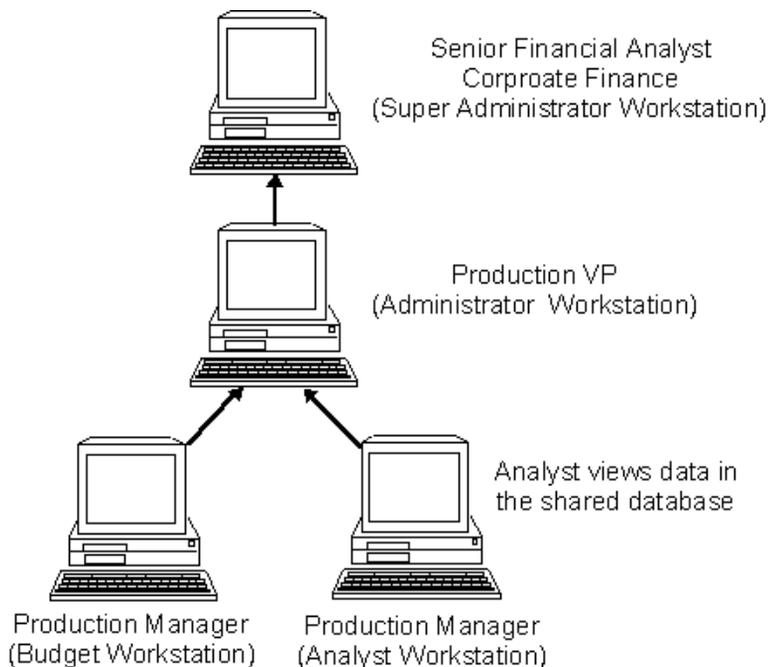


## Corporate finance

In general, all Manufacturing and Consulting related workstations report directly to the Super administrator workstation in Corporate Finance. Other Financial Analyzer users in the Corporate Finance Department are either Budget or Analyst workstations, all of which report to the Super administrator workstation.

A Senior Financial Analyst or a number of Senior Financial Analysts are responsible for the collection of budget and forecast data throughout the organization. If there are a number of these positions, they act as Administrator workstations which then report to a Super administrator workstation within the Corporate Finance Department. The Senior and Junior Financial Analysts all require analysis and

modeling capabilities to review and possibly modify the information coming in from other areas of the organization.

Other specialists in the Corporate Finance Department can require either the Budget or Analyst workstation functionality:

- The CFO normally requires only Analyst workstation functionality
- Budget or Forecast Analysts who concentrate primarily on forward trends and potential changes in the projected performance path require Budget workstations

The Super administrator resides in the Corporate Finance Department and the number of Sub administrator workstations it supports depends on whether data from other areas of the organization is submitted to one or many workstations within the Corporate Finance department.

The following illustration shows Corporate Finance.
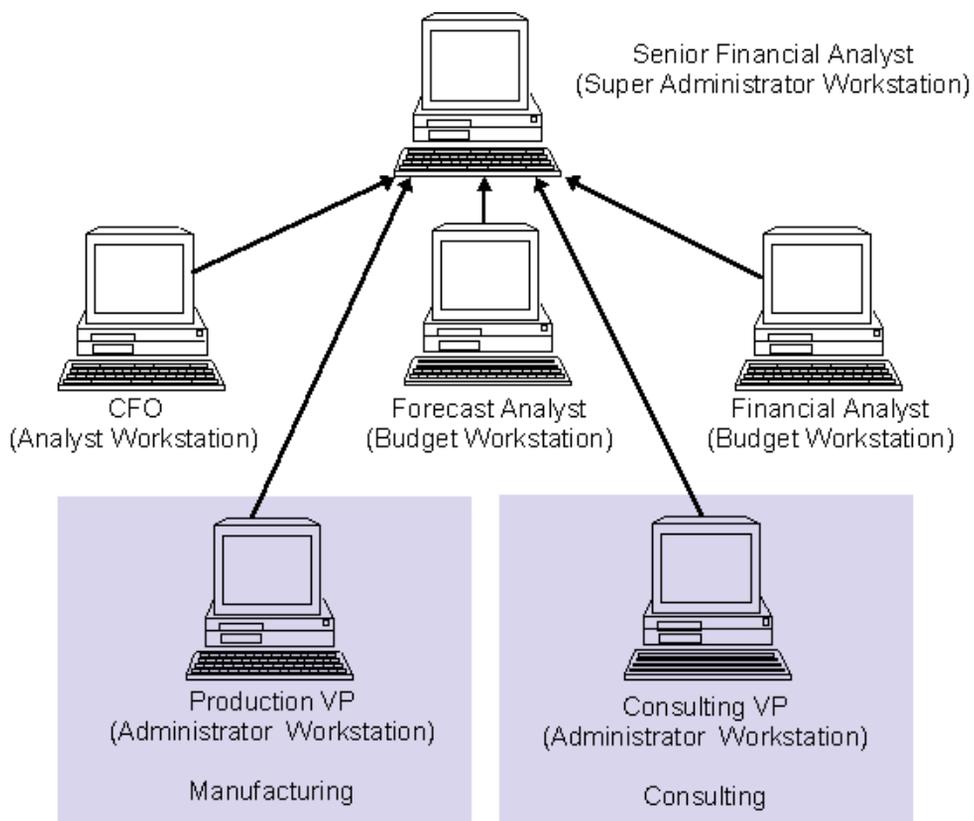
# Comparison of Workstation Types

## System management tasks

The following table shows the different types of workstations and the system management tasks that each can accomplish.

| Task | Super Administrator | Administrator | Task Processor | Budget | Analyst |
|---|---|---|---|---|---|
| Configure workstations | X | All but Super administrator | | | |
| Control user access to database objects | X | X | | | |
| Define and maintain users | X | All but Super administrator | | | |
| Monitor and control transfer of data | X | X | X | | |
| Set fiscal time | X | | | | |
| Specify default configurations for Budget and Analyst workstations | X | X | | | |

## Data management tasks

The following table shows the different types of workstations and the data management tasks that each can accomplish.

| Task | Super Administrator | Administrator | Task Processor | Budget | Analyst |
|---|---|---|---|---|---|
| Create data structures | X | X | | Personal only | |
| Create and maintain personal documents | X | X | | X | X |

| Task | Super Administrator | Administrator | Task Processor | Budget | Analyst |
|---|---|---|---|---|---|
| Distribute financial data | X | X | | | |
| Distribute structures | X | To all but Super administrator | | | |
| Maintain personal data | X | X | | X | |
| Submit data to shared database via the Task Processor | X | X | N/A | X | X |
| Process tasks in the shared database | | | X | | |
| View task log | X | X | X | X | X |
| Integrate with Oracle General Ledger | X | | | | |
| Refresh data distributed from higher level administrators | | X | | X | X |
| Use the Copy Data feature | X | X | | X | |

# Typical Financial Analyzer Configurations

## Simple configuration

The simplest system configuration is made up of the following:

- A single Super administrator workstation that includes a super shared database and Task Processor

- One or more user workstations

The following illustration shows an example of a simple system configuration.
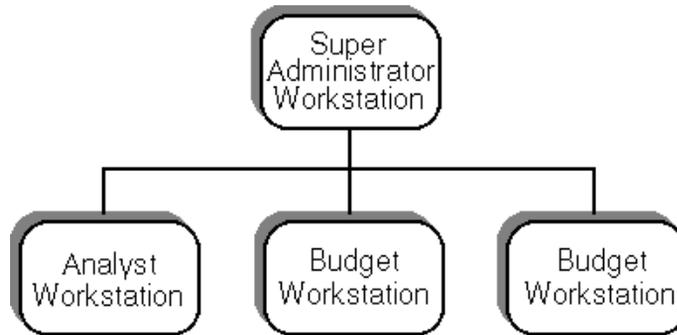


## Complex configuration

A more complex system configuration can be set up with multiple tiered structures. In a structure with multiple tiers, each level, or tier, includes the following:

- A single Super administrator workstation, that includes a super shared database and Task Processor

- One or more Administrator workstations that each include a shared database and Task Processor

- One or more user workstations that communicate with the Administrator workstation in the tier immediately above them

The following illustration shows a more complex system configuration.
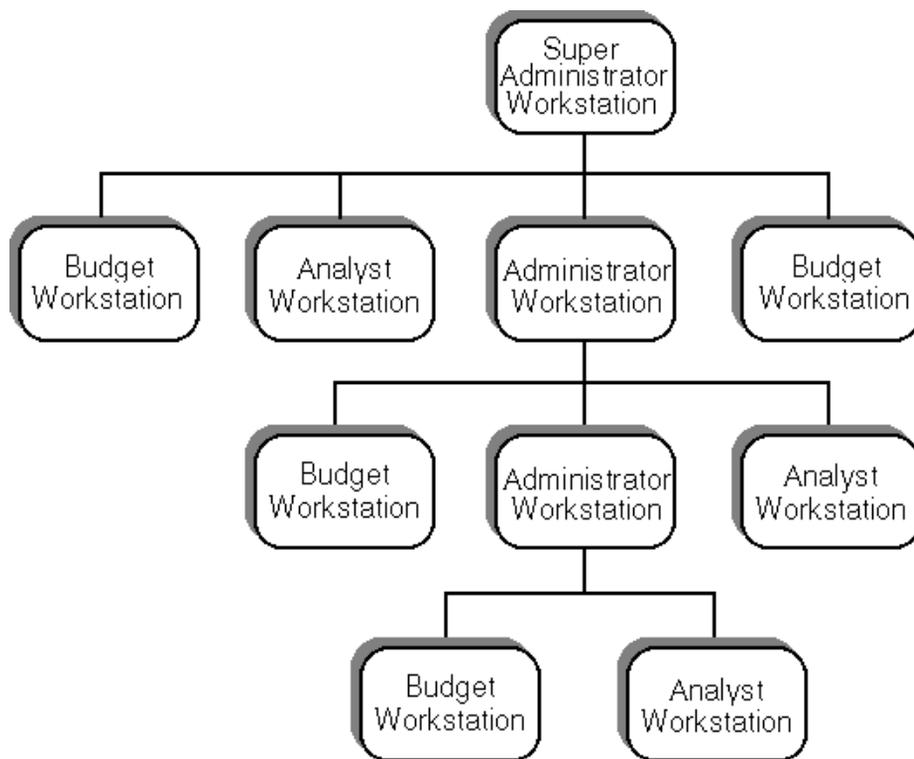


# External Users

## About external users

In addition to supporting access through workstations, Financial Analyzer supports external users. External users have access to their administrator's shared database. No client software needs to be installed on the local PC.

There are two types of external users:

- External Web users
- External Express Spreadsheet Add-In users

## External Web users

External Web users access Financial Analyzer reports and graphs through a Web browser. An external Web user can also use data entry forms to enter data into the shared database. An external Web user cannot create or maintain personal documents, create or distribute data structures, or distribute data.

## External Express Spreadsheet Add-In users

Express Spreadsheet Add-In users fetch data from one or more Financial Analyzer databases and work with the data in a spreadsheet environment. An Express Spreadsheet Add-In user who is an external user is limited to data manipulation; no personal database is available.

# 2

# Getting Started

## Chapter summary

This chapter provides basic information about Financial Analyzer.

## Who should read this chapter

All workstation users should read this chapter.

## List of topics

This chapter includes the following topics:

- About Financial Analyzer
- Financial Analyzer Window
- Financial Analyzer Menu Bar
- Financial Analyzer Toolbar
- Financial Analyzer Edit Bar
- Starting Financial Analyzer
- Working in a Stand-Alone Session
- Using the Custom Menu Feature
- Using Online Help

# About Financial Analyzer

## Financial Analyzer documents

You can work with four types of documents in Financial Analyzer:

- Reports
- Graphs
- Worksheets
- Data entry forms

## Reports

You use reports to view your financial data from different perspectives and prepare presentations based on your analyses.

The following illustration shows an example of a Financial Analyzer report.

| Budget Analysis | | | | |
|---|---|---|---|---|
| Organization [4] | | | | Time [1] / FinData [4] |
| **Consulting** | **Quarter 1, 1999** | | | |
| | **Actuals** | **Budget** | **Var Bud $** | **Bud Var %** |
| Headcount | 3,372 | 3,372 | 0.0 | 0.0 |
| Consulting Revenue | 129,515,846 | 130,988,000 | (1,472,154.4) | (1.1) |
| Salaries | 189,596,949 | 37,785,000 | (151,811,949.2) | (401.8) |
| Bonuses and Commissions | 9,232,407 | 1,889,250 | (7,343,156.5) | (388.7) |
| Benefits | 56,201,989 | 11,073,912 | (45,128,077.3) | (407.5) |
| Travel and Entertainment | 6,566,453 | 7,180,107 | 613,653.9 | 8.5 |
| Office Expenses | 7,382,403 | 8,970,838 | 1,588,434.5 | 17.7 |
| Other Expenses | 2,201,769 | 3,282,627 | 1,080,857.7 | 32.9 |
| Total Expense | 271,181,970 | 70,181,734 | (201,000,236.9) | (286.4) |
| Gross Profit | 129,515,846 | 60,806,266 | 68,709,579.2 | 113.0 |
| Revenue Per Headcount | 38,409 | 38,846 | (436.6) | (1.1) |
| Line [11] | | | | |

## Graphs

You use graphs to create visual representations of your financial data.

The following illustration shows an example of a Financial Analyzer graph.
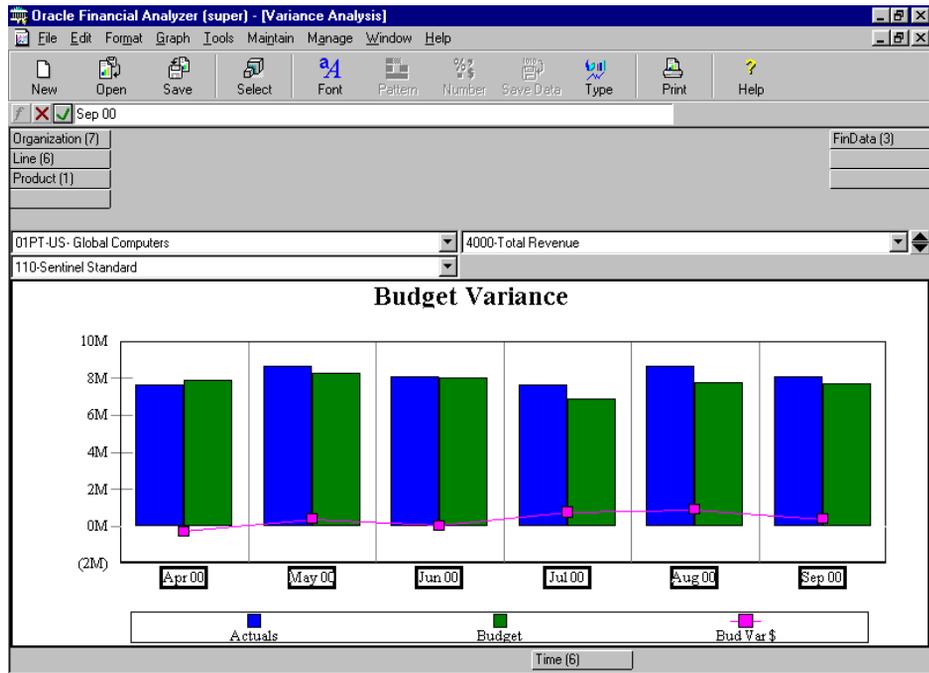


## Worksheets

You use worksheets to enter and manipulate financial data.

The following illustration shows an example of a Financial Analyzer worksheet.

| Budget | | | | | | _ □ X |
|---|---|---|---|---|---|---|
| Consulting ▼ | | | | Budget | | |
| | January 2000 | February 2000 | March 2000 | April 2000 | May 2000 | June 2000 |
| Rent Expense | 1,521,757 | 1,521,073 | 1,523,610 | 1,518,558 | 1,499,777 | 1,509,510 |
| Equipment Expense | 274,976 | 276,511 | 276,423 | 276,183 | 278,495 | 278,605 |
| Computer Expense | 886,481 | 883,723 | 888,024 | 900,392 | 885,899 | 892,513 |
| Utility Expense | 306,080 | 305,297 | 306,883 | 306,268 | 307,332 | 307,791 |
| + Office Expenses | 2,989,294 | 2,986,604 | 2,994,940 | 3,001,401 | 2,971,503 | 2,988,418 |
| Other Expenses | 1,095,783 | 1,100,048 | 1,086,796 | 1,095,438 | 1,085,798 | 1,087,936 |
| + Headcount | 3,332 | 3,372 | 3,372 | 3,372 | 3,372 | 3,372 |
| Consulting Revenue | 43,316,000 | 43,836,000 | 43,836,000 | 43,836,000 | 43,836,000 | 43,836,000 |
| Salaries | 12,495,000 | 12,645,000 | 12,645,000 | 12,645,000 | 12,645,000 | 12,645,000 |
| + Bonuses and Commissions | 624,750 | 632,250 | 632,250 | 632,250 | 632,250 | 632,250 |
| + Benefits | 3,661,996 | 3,705,958 | 3,705,958 | 3,705,958 | 3,705,958 | 3,705,958 |
| + Travel and Entertainment | 2,391,347 | 2,400,670 | 2,388,090 | 2,405,780 | 2,387,762 | 2,386,560 |
| + Total Expense | 23,258,170 | 23,470,529 | 23,453,034 | 23,485,826 | 23,428,270 | 23,446,122 |
| Gross Profit | 43,316,000 | 43,836,000 | 43,836,000 | 43,836,000 | 43,836,000 | 43,836,000 |
| Gross Profit % | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

Down Model: None
Across Hierarchy: None                                    Drill Hierarchy: Line Rollup

## Data Entry Forms

You use data entry forms to enter data using the Financial Analyzer Web interface.

The following illustration shows an example of a Financial Analyzer data entry form in a Web browser.



## Compatibility with other products

You can use Financial Analyzer in conjunction with the following products:

- Oracle General Ledger – If your site has purchased Oracle General Ledger, you can integrate it with Financial Analyzer during installation and setup.

- Microsoft® Excel – You can choose to install the Oracle Express Spreadsheet Add-In when installing a Financial Analyzer workstation. This enables you to fetch data from one or more Financial Analyzer databases and work with Financial Analyzer data in a spreadsheet environment.

- Oracle Express Objects and Oracle Express Analyzer – If you have purchased Oracle Express Objects and Oracle Express Analyzer you can enable your Financial Analyzer databases for use with these products. You can then use Oracle Express Objects and Oracle Express Analyzer to develop custom applications.

# Financial Analyzer Window

## Financial Analyzer window components

The following illustration shows the components of the Financial Analyzer window.



## Description of Financial Analyzer window components

The following table describes the Financial Analyzer window components.

| Component | Description |
|-----------|-------------|
| Title bar | Displays the name of the database or workstation. |
| Menu bar | Contains the names of Financial Analyzer menus. You open menus and then choose menu items to perform tasks. |
| Tool bar | Provides you with quick access to commonly used functions through a set of buttons. When you start up Financial Analyzer for the first time, the toolbar is displayed automatically. |
| Edit bar | Features an area for modifying report, worksheet, and graph components such as titles, labels, and footnotes. It can also be used in worksheets to edit data, and in reports to enter calculation formulas. |

| Component | Description |
|---|---|
| Edit bar buttons |  |
| | In reports, the *Formula Tools* button invokes the Formula Tools dialog box, where you can edit formulas to perform report calculations. This button is disabled in Worksheets and Graphs. |
| |  |
| | The *Cancel* button clears text or formulas from the edit bar. |
| |  |
| | The *Enter* button moves text or formulas from the edit bar into the currently selected area. |
| Application window | The area where Financial Analyzer documents, such as reports, graphs, and worksheets, appear. |

# Financial Analyzer Menu Bar

## Standard control menus

The Financial Analyzer menu bar always contains the following control menus.

File   Edit   Format   Tools   Maintain   Manage   Window   Help

To see a control menu, move the pointer to the item you want to view and choose it. The following sections describe the control menus.

## File menu

The following table describes the File menu.

| Menu Item | Description |
|---|---|
| **New** | Creates a new document. |
| **Open** | Opens an existing document. |
| **Close** | Closes an open document. |
| **Save** | Saves an open document under its current name. |
| **Save As** | Saves an open document under another name. |
| **Rename** | Renames an existing document. |
| **Delete** | Deletes an existing document. |
| **Add to Folder** | Adds a document to a folder. |
| **Print Preview** | Enables you to view a document before you print it. |
| **Print** | Prints the current document. |
| **Print Setup** | Enables you to set up the printing specifications for a document. |
| **Print Multiple** | Enables you to print multiple documents within one print session. |
| **Export to File** | Exports data from a document to a file that can be used in another application. |
| **Exit** | Exits Financial Analyzer. |
| ***Recently Opened Document Name(s)*** | Lists the names of up to five recently opened documents, from which you can choose a document to open. |

## Edit menu

The following table describes the Edit menu.

| Menu Item | Description |
|---|---|
| **Cut** | Selects a portion of a document and moves it to the Clipboard. |
| **Copy** | Copies a portion of a document to the Clipboard. |
| **Paste** | Pastes the contents of the Clipboard into the current document. |
| **Paste Link** | Links selected tiles between two documents. |
| **Clear** | Clears the contents of selected cells in a report or worksheet. |

| Menu Item | Description |
|---|---|
| **Clear Link** | Clears a link between two documents. |
| **Highlight Special** | Enables you to highlight labels, data, or both in reports and worksheets for formatting purposes. |
| **Insert** | Opens a cascading menu that contains the following items:<br><br>■ **Row/Column** — Opens the Insert Rows Dialog Box or the Insert Columns Dialog Box, which allow you to insert columns or rows in reports and worksheets.<br><br>■ **Page break** — Enables you to insert page breaks into reports and worksheets. |
| **Move Insert** | For reports that have inserted rows and columns, opens the Move Insert dialog box, which enables you to move inserted rows and columns in reports. |
| **Delete** | Opens a cascading menu that contains the following items:<br><br>■ **Row/Column** — Enables you to delete inserted columns or rows in reports and worksheets.<br><br>■ **Page break** — Enables you to delete inserted page breaks from reports and worksheets. |

## Format menu

The following table describes the Format menu.

| Menu Item | Description |
|---|---|
| **Number** | Formats numbers in reports, graphs, and worksheets. |
| **Alignment** | Sets the horizontal and vertical positioning of a selected component in a document. |
| **Font** | Sets the typeface, font style, size, and color of text in a document. |
| **Patterns** | Sets the pattern and color of data cells and labels. |
| **Axis Options** | Sets axis options for selected axis in a graph. |
| **Series Options** | Enables you to modify the manner in which data series are represented in a graph. |
| **Border** | Adds a border to selected parts of a report, and sets width, color, and border style. |
| **Row Height** | Sets the row height in a report, worksheet, or data entry form. |

| Menu Item | Description |
|---|---|
| **Column Width** | Sets the column width in a report, worksheet, or data entry form. |
| **Page Setup** | Sets page and print options, margins, headers, or footers. |

## Report menu

The following table describes the Report menu. This menu is accessible when a Report document is open.

| Menu Item | Description |
|---|---|
| **Report Options** | Opens the Report Options dialog box, where you choose elements to display in the report. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Drill** | When checked, enables drilling in reports. |
| **Auto Redisplay** | When checked, specifies that reports are to be automatically redisplayed when you make changes to them. |
| **Asymmetric Format** | Opens the Create Asymmetric Combination dialog box, where you can join the values of two dimensions and create a custom arrangement of their values. |
| **Ranking/ Exception Report** | Opens the Ranking and Exception Setup dialog box, where you can specify the criteria for a ranking and exception report. |
| **Drill to GL** | Provides detailed information in General Ledger that may not appear on a report. This option is accessible only if you are working with a report based on data that was loaded from General Ledger and you are set up to use the GL Link. |

## Graph menu

The following table describes the Graph menu. This menu is accessible when a graph document is open.

| Menu Item | Description |
| --- | --- |
| **Type** | Opens the Graph Type dialog box, which enables you to specify the type of graph you want to use. |
| **Legend** | Opens the Legend dialog box, where you can specify whether to display a legend for your graph. This dialog box also enables you to format the legend. |
| **Pie Options** | Opens the Pie Options dialog box, where you can specify labels for a pie graph and/or its slices and perform other formatting functions. |
| **Grid** | Opens the Grid dialog box, where you can specify whether to display gridlines along the X- and/or Y-axis of a graph. |
| **Graph Options** | Opens the Graph Options dialog box, where you can specify information for graph controls, text, attributes, and axis titles. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Auto Redisplay** | When checked, specifies that graphs are to be automatically redisplayed when you make changes to them. |

## Worksheet menu

The following table describes the Worksheet menu. This menu is accessible when a worksheet document is open.

| Menu Item | Description |
| --- | --- |
| **Worksheet Options** | Opens the Worksheet Options dialog box, where you can choose elements to display in a worksheet. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Drill** | When checked, enables drilling in worksheets. |
| **Auto Redisplay** | When checked, specifies that worksheets are to be automatically redisplayed when you make changes to them. |

| Menu Item | Description |
|---|---|
| **Drill to GL** | Provides detailed information in General Ledger that may not appear on a worksheet. This option is accessible only if you are working with a worksheet based on data that was loaded from General Ledger and you are set up to use the GL link. |
| **Worksheet Tools** | Opens the Worksheet Tools cascading menu which contains the following items: <br><br> ■ **Grow Data** — Opens the Grow Data dialog box, which enables you to grow data by a specified amount or percent across months. <br><br> ■ **Increase Data** — Opens the Increase dialog box, where you can increase data for selected months by a specified amount or percent. <br><br> ■ **Spread Data** — Opens the Spread dialog box, where you can apply a value to a parent in a hierarchy and spread that data to its descendants in the hierarchy. <br><br> ■ **Recalculate** — Enables you to recalculate data after you have entered data for dimension values. <br><br> ■ **Recalc Options** — Opens the Recalc Options dialog box, enabling you to specify options for recalculating data. <br><br> ■ **Save Data** — Enables you to save worksheet data without saving the current worksheet definition. <br><br> ■ **Reset Data** — Returns worksheet data to the values that were displayed when the worksheet was last opened or the worksheet was last saved. |

## Data Entry Form menu

The following table describes the Data Entry Form menu. This menu is accessible when a data entry form document is open.

| Menu item | Description |
|---|---|
| **Form Options** | Opens the Data Entry Form Options dialog box, where you can perform the following functions:<br><br>■   Show or hide text elements such as titles, subtitles, and footnotes.<br><br>■   Enter annotations.<br><br>■   Specify how NA values will be displayed. |
| **Data Options** | The Number Format submenu item opens the Number Format dialog box, where you can specify the number format (positive, negative, decimal) for a financial data item.<br><br>The Calculations submenu item opens the Calculations dialog box, where you can associate a solve definition with a financial data item. |
| **Dimension Labels** | Opens the Dimension Labels dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Asymmetric Format** | Opens the Create Asymmetric Combination dialog box, where you can join the values of two dimensions and create a custom arrangement of their values. |

## Tools menu

The following table describes the Tools menu.

| Menu Item | Description |
|---|---|
| **Selector** | Opens the Selector dialog box, which enables you to choose the dimension values that appear in a document. |
| **Solve Definition** | Opens the Solve Definition dialog box, which enables you to create and use solve definitions to calculate data. |
| **Group Solve Definition** | Opens the Group Solve Definition dialog box, which enables you to create and use group solve definitions to calculate data. |
| **Copy Data** | Opens the Copy Data dialog box, which enables you to copy financial data between financial data items or set the data in a financial data item to NA. |
| **Maintain Folders** | Opens the Maintain Folders dialog box, which enables you to create, add documents to, delete documents from, and order documents in, a folder. |

| Menu Item | Description |
|---|---|
| **Custom Colors** | Opens the Custom Color dialog box, which enables you to customize and rename the standard colors that are available to you in Financial Analyzer. |
| **Custom Menus** | Opens the Custom Menus dialog box, which enables you to create custom menu items that run Express programs or call other applications. |
| **Options** | Opens the Options dialog box, which enables you to select optional elements to include in the Financial Analyzer window. Administrators can also specify the operational mode for their workstation. |
| **Enable *database* DB for Express Clients** | Enables your Financial Analyzer database to be compatible with Express Client software. |

## Maintain menu

The following table describes the Maintain menu.

| Menu Item | Description |
|---|---|
| **Dimension** | Opens the Maintain Dimension dialog box, from which you can define and maintain dimensions. |
| **Financial Data Item** | Opens the Maintain Financial Data Item dialog box, from which you can define and maintain financial data items. |
| **Time** | Opens the Maintain Time dialog box, which enables you to create and maintain time dimension values and sets the current time. |
| **Dimension Value** | Opens the Maintain Dimension Value dialog box, where you can create and maintain dimension values. |
| **Attribute** | Opens the Maintain Attributes dialog box, which enables you to associate a characteristic with multiple values. |
| **Hierarchy** | Opens the Maintain Hierarchy dialog box, which enables you to define and maintain the tree structures used to relate dimension values. |

| Menu Item | Description |
|---|---|
| **Model** | Opens the Maintain Model dialog box, where you can create and maintain models. |
| **Data Loaders** | Opens a cascading menu which contains the following options:<br><br>■ **Create** — Opens the Oracle Express Administrator Browser window, where you can create data loader programs.<br><br>■ **Maintain Groups** — Opens the Maintain Data Loader Groups dialog box, which enables you to create sets of data loaders that you can run as a single process.<br><br>■ **Run** — Opens the Run Data Loaders dialog box, where you can set up the data loaders and run them. |

## Manage menu

The following table describes the Manage menu.

| Menu Item | Description |
|---|---|
| **Distribution** | Opens a cascading menu, which contains the following menu items:<br><br>■ **Distribute Structure** — Opens the Distribute Structure dialog box, which enables administrators to distribute structures, such as dimensions or reports, to their users.<br><br>■ **Distribute Data** — Opens the Distribute Data dialog box, which enables administrators to distribute data to their users. |
| **Distribution Reports** | Opens a cascading menu, which contains menu items that enable you to open the Distribution Report dialog box:<br><br>■ **Based on Distributed Values** — Provides information for values of a structure that have been distributed to at least one user.<br><br>■ **Based on All Values** — Provides information for all values of a structure, whether or not they have been distributed to a user. |
| **Users** | Opens the Maintain Users dialog box, which enables administrators to add and delete users from the system. |
| **Write Access Profiles** | Provides access to the Write Access Profiles dialog box, which enables you to set access restrictions on data. (Available in Super administrator and Administrator workstations.) |
| **Submit Documents** | Provides access to the Submit Documents dialog box, which enables you to select documents to submit to the shared database. (Available in non-Administrator workstations.) |

| Menu Item | Description |
|---|---|
| **Task Processor** | Opens the Task Processor dialog box, which enables you to process tasks submitted by Administrator, Budget, and Analyst workstations. (Available in Super administrator and Administrator workstations.) |
| **Task Queue** | Opens the Task Queue dialog box, where you can view information about distribution tasks. (Available in all workstations.) |
| **Refresh Structures** | Opens the Refresh Preview dialog box, which enables you to view which structures will be added, deleted, or overwritten when you refresh your database. (Available in Administrator, Budget, and Analyst workstations). |
| **Submit Data** | Sends data to your administrator. In an Administrator workstation, sends data to the administrator's shared database or to the shared database maintained by a higher level administrator. |
| **Refresh Data** | In a Budget workstation, refreshes your database with data retrieved from the shared database. In an Administrator workstation, retrieves structures from the administrator's shared database or refreshes the administrator's shared database with structures distributed by a higher level administrator. (Available in Super administrator, Administrator, and Budget workstations.) |
| **Oracle General Ledger Interface** | If you have installed Oracle General Ledger, opens a cascading menu, which contains the following items: <br><br> ■ **Submit Load from GL** — Opens the Submit Load from GL dialog box, which enables you to log into your GL Account and load data into General Ledger either manually or automatically. <br><br> ■ **Refresh GL** — Opens the Refresh GL Structure dialog box, which enables you to see which database objects from General Ledger are to be added, deleted, or overwritten when you refresh your database. <br><br> ■ **Write Budget to GL** — Opens the Write Budget to GL dialog box, which enables you to specify the data to write back to General Ledger. <br><br> ■ **Add GL Dimension Values** — Opens the Add GL Dimension Values dialog box, which enables you to create dimension values for General Ledger segment values that were imported into Financial Analyzer but which had no associated balances at the time they were loaded. <br><br> ■ **GL Access Settings** — Opens the GL Access Settings dialog box, which enables you to specify the financial data set to be downloaded and the name of the account on the host computer where the Oracle General Ledger data reside. <br><br> (Available in Super administrator workstations.) |

## Window menu

The following table describes the Window menu.

| Menu Item | Description |
|---|---|
| **Cascade** | Arranges open document windows in an overlapping fashion so that each title bar is visible and accessible. |
| **Tile Horizontally** | Arranges open document windows so that they share the application window equally and align horizontally without overlapping. |
| **Tile Vertically** | Arranges open document windows so that they share the application window equally and align vertically without overlapping. |
| **Arrange Icons** | Arranges document icons into rows with equal space between them. |
| ***Open Document Name(s)*** | Lists the names of currently open documents, from which you can choose a document, making it the active document on your screen. |

## Help menu

The following table describes the Help menu.

| Menu Item | Description |
|---|---|
| **Contents** | Displays a list of topics about which you can view Help information. |
| **Search for Help On** | Displays the Search dialog box, where you can enter search keywords to find topics on which you need help. |
| **How to Use Help** | Provides further information on how to use Help. |
| **About Financial Analyzer** | Provides external and internal version numbers for Financial Analyzer. |

## Custom add-in menu

As an administrator, you can add a custom menu to the Financial Analyzer menu bar. The custom menu can contain options that invoke Express programs or other applications. When you create a custom menu, it appears on the menu bar between the Window menu and the Help menu. For more information, see "Using the Custom Menu Feature" on page 2-23.

# Financial Analyzer Toolbar

## Definition: Toolbar

The toolbar provides quick access to frequently used commands.

## Toolbar buttons

The following table shows each button on the toolbar and describes its function.

| Button | Function |
|--------|----------|
| New | Opens the New dialog box, which enables you to create a new document. |
| Open | Opens the Open dialog box, from which you can open a saved document. |
| Save | Enables you to save the active document. |
| Select | Opens the Selector dialog box, where you can specify the data with which you want to work. |
| Font | Displays the Font dialog box, which enables you to specify font, style, and size of text or data in a document. |
| Pattern | Opens the Patterns dialog box, which enables you to specify characteristics, such as color, pattern, line style, and width, in the current report, graph, or worksheet. |

| Button | Function |
|--------|----------|
| **%.$** Number | Opens the Format Number dialog box, which enables you to change the format for numeric values and dates. |
| Save Data | The Save Data button saves the data in the current worksheet. |
| Type | Opens the Graph Type dialog box, where you can choose the type of graph that you want to view. |
| Print | Opens the Print dialog box, which enables you to print the active document. |
| **?** Help | Enables you to access online information that explains how to perform a task or describes what is currently displayed on your screen. |
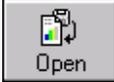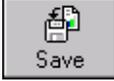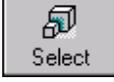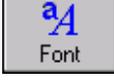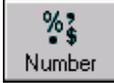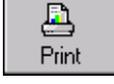
## Toolbar display options

You can control the following toolbar display options:

- Whether the toolbar is displayed

- Whether toolbar text is displayed

- Toolbar style: raised or flat

To specify toolbar options, choose **Options** from the Toolbar menu. This activates the Options dialog box, where you can make your selections.

# Financial Analyzer Edit Bar

## Definition: Edit bar

The Edit bar enables you to edit text elements in reports, graphs, worksheets, and data entry forms as well as values and text in some dialog boxes.

## Elements that you can edit

The following list describes the elements you can edit in each document type:

- In graphs you can edit the title, subtitle, X-axis tick label, Y-axis tick label, axis title, legend label, or footnote

- In reports, worksheets, and data entry forms you can edit titles, subtitles, row labels, column labels, or footnotes

- In worksheets, you can edit data

- In reports, you can edit calculation formulas

# Starting Financial Analyzer

## Logging in

You must connect to an Express Server session to start Financial Analyzer. After the first time you log in, the system saves the information that you enter in the Connect to Express Server dialog box. You only have to enter your password in subsequent sessions.

## How to log into Express Server

Follow this procedure to log into Express Server.

1. Double-click on the Financial Analyzer icon.

   The Connect to Express Session dialog box appears.

2. Complete the fields in the dialog box as follows:

   - In the Username box, enter your username for the system on which the Express Server session you are logging into is located.

   - In the Password box, enter your password.

- In the Domain box, enter the domain name for your PC, if required.

- In the Name box, enter the name of the personal database to which you want to connect.

- In the Path box, enter the full path for the database to which you want to connect.

- If you want to work in a stand-alone session, select **Express installed on local workstation.**

- In the Server box, enter the name of the server to which you want to connect.

- If multiple instances of Express Server are running on the server, enter the unique universal identifier (UUID) for the Express Server instance to which you want to connect.

3. Select **OK**.

   The Financial Analyzer main window appears.

**Note:** Contact your system administrator to obtain the correct login information for your system.

# Working in a Stand-Alone Session

## Definitions: Thick and thin clients

### Thick client
A client is considered thick if the personal database and Personal Express are installed on the PC and a majority of processing takes place on the PC.

### Thin client
A client is considered thin if the personal database and express server are installed on the server and a majority of processing occurs on the server.

## About working stand-alone

You can work without being attached to the shared database if your PC is set up as a thick client. When you start the software while working on a stand-alone workstation, the software warns you that you are not able to connect to the shared

database and asks if you want to work unattached. If you choose **Yes,** you will be running in a stand-alone session, where you are unable to receive distributions or submit your work. During a subsequent work session when you are attached to the shared database, you can submit the data that you worked on during your unattached session.

You can specify a setting in the Options dialog box that tells the system to automatically ask if you want to work unattached to the shared database. Setting this option enables users who are working away from the office to bypass a set of message boxes requesting passwords and providing warning messages.

## Conditions that must be met

You can work in a stand-alone session unattached to the shared database if the following conditions are met:

- You are working on a Super administrator, Administrator, or Budget workstation.

- You installed a personal copy of Financial Analyzer code.

- You are working on a PC that is set up as a thick client.

## When you can work stand-alone

Using this feature, you can continue to work productively even if:

- You have to be away from your office and do not have the ability to communicate with the shared database.

- You are unable to connect to the shared database because of communications problems within your normal working environment.

## When you cannot work stand-alone

You cannot work stand-alone if:

- You are using an Analyst workstation. This is because Analyst workstations must always attach directly to the shared database.

- You are on a workstation that does not have a copy of personal code installed.

- You are working on a PC that is set up as a thin client.

# Using the Custom Menu Feature

## About the Custom Menu feature

As an administrator, you can add a custom menu to the Financial Analyzer menu bar. The custom menu can contain menu groups and menu items.

- Menu group — Provides access to a submenu of related menu items. You can add up to ten menu groups to a custom menu.

- Menu item — Accesses a single executable or Express program.

The menu structure that you create can include one or more single-level menu items, one or more menu groups (each of which branches to multiple menu items), or a combination of menu items and menu groups.

## Creating a custom menu

You choose **Custom Menus** from the Tools menu to create a custom menu. This opens the Custom Menus dialog box, where you can perform the following functions:

- Enter a descriptive name for the custom menu.

- Insert one or more menu groups and specify the order in which they will appear on the menu.

- Insert one or more menu items under the main menu or a menu group, specify the order in which items will appear, and provide information about the custom programs that are called by the menu items.

You provide the following information for each menu item:

- The type of users who will have access to the menu item.

- The type of program that the menu item will call: Express routine or an executable.

- The name of the program that will run when a user chooses the custom menu item.

- If users will be prompted to provide information in order for the program to run, the text that will prompt the user for input.

- How the custom program window will appear to the user: Normal, Minimized, or Maximized.

- If a message will be displayed when the program is completed.

## Example: Creating a custom menu

The following illustration shows the Custom Menus dialog box for a custom menu that includes one group and one item. In this example, the menu name is Custom Programs, the menu group is APIs, and the menu item under the menu group is API123, an Express program.
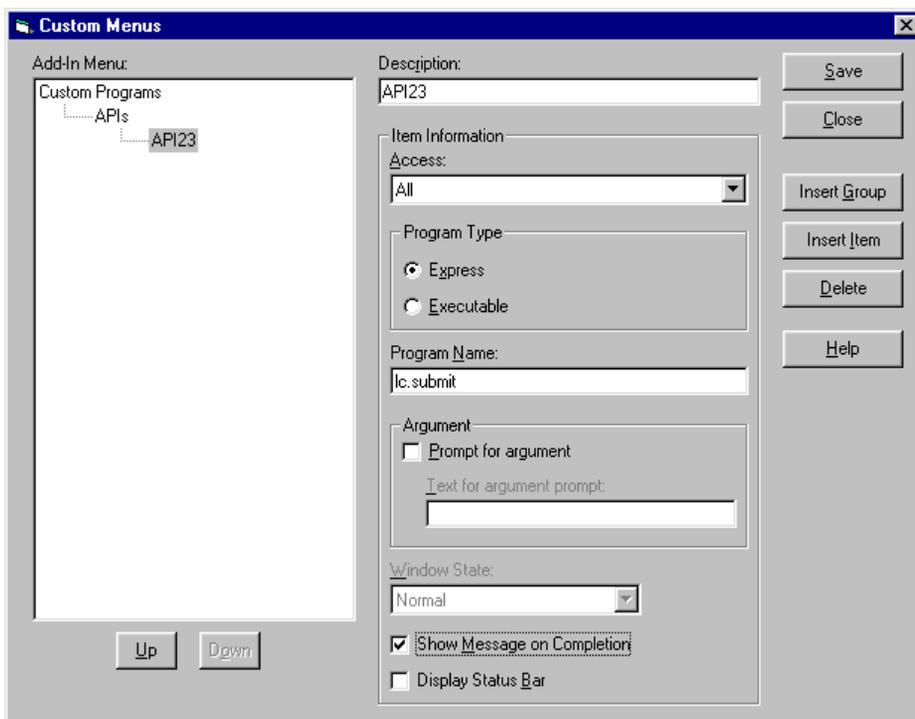


## How the custom menu is displayed

The custom menu is displayed on your Financial Analyzer menu bar after you have created at least one custom menu group or item. If you do not change the menu name, the menu bar displays the default name, "Add-In,"; if you change the menu name, the menu bar displays the name that you provide.

## Distributing the custom menu

You distribute custom menu groups and items to the users who need access to these programs. You can give different users access to different options.

**Note:** While you can use Financial Analyzer's distribution feature to propagate the custom menu groups and items that you create, you cannot use it to distribute your custom programs. You must perform this task manually.

## Modifying the Custom menu

You choose **Custom Menus** from the Tools menu to modify the custom menu. This opens the Custom Menus dialog box, where you can change information for menu name, menu groups, and menu items. You can also rearrange the order of groups and items on the menu and delete a group, an item, or even the entire menu.

Ensure that you distribute custom menu modifications to the appropriate users.

## Related information

For more information about working with a custom menu, see the following topics in the Financial Analyzer Help system:

"Creating Custom Menu Groups and Items"
"Deleting Custom Menu Groups and Items"

# Using Online Help

## Overview

The online Help system included with the software is comprehensive and easy to use. It is your best source of procedural information and is designed to give you step-by-step instructions on how to do almost everything in the application.

## How to access the Help system

To access the Help system, click on the Help button on the toolbar or select the Help menu from the Menu bar. The initial help screen contains a list of underlined topics. Choose these topics for more information.

## How to find specific information

Use the following procedure to find information on specific topics in the Help System.

1.  Choose **Search for help on...** from the Help menu,

    *or*

    Choose **Search** at the top of the Help screen.

    The Help topics dialog box appears.

2.  Select the Index tab.

3.  In the box at the top of the tab, type the first few letters of the word you are looking for. The list of topics below will change to reflect what you have typed.

4.  Highlight the appropriate topic and press **Enter**.

    - If the topic you selected is related to a single help topic, Financial Analyzer displays that help topic.

    - If the topic you select is related to more than one help topic, Financial Analyzer displays the Topics Found dialog box.

5.  If the Topics Found dialog box is displayed, highlight the appropriate topic and press **Enter**.

6.  To return to the help topic that you last viewed, choose **Back**.

# 3

## Dimensions and Dimension Values

### Chapter summary

This chapter describes dimensions and dimension values.

### Who should read this chapter

You need to know the information in this chapter if you are:

- An administrator who creates and maintains dimensions and dimension values for personal use as well as for distribution to users of the shared database that you administer

- A Budget workstation user who creates dimensions and dimension values for personal use and uses dimensions and dimension values that have been distributed to you

- An Analyst workstation user who, although unable to create or maintain them, wishes to gain a basic understanding of dimensions and dimension values

### List of topics

This chapter includes the following topics:

- About Dimensions and Dimension Values

- Creating and Modifying Dimensions

- Suggested Ways to Set Up Dimensions

- Creating and Modifying Dimension Values

# About Dimensions and Dimension Values

## How data is organized

Data is organized in Financial Analyzer using three kinds of data structures:

- Dimensions
- Dimension values
- Financial data items

Financial data items are made up of dimensions, which in turn are made up of dimension values.

## Definition: Dimensions

Dimensions are database objects that perform the following functions:

- They organize the data contained in financial data items
- They answer the following questions about data: *what*, *when*, and *where*
- They enable you to select and work with specific subsets of data

## Definition: Dimension values

Dimension values are the elements that make up a dimension.

## Example: Dimensions and dimension values

The report in this example contains the following dimensions and dimension values:

| Dimension | Dimension Values |
|---|---|
| Line | Taxes, Benefits, Office Expenses |
| Organization | Eastern Region, Central Region, West Region |
| Time | January 1996 |

The report displays information for a financial data item called Actuals.

| 1996 Financials | | | |
|---|---|---|---|
| Time (3) | | | FinDat |
| | | | Line (3) |

| January 1996 | Actual's | | |
|---|---|---|---|
| | Taxes | Benefits | Office Expenses |
| Eastern Region | 5,565,146 | 1,747,512 | 1,057,818 |
| Central Region | 729,913 | 221,927 | 173,737 |
| West Region | 4,799,825 | 1,326,416 | 1,094,919 |

The following illustration shows how the intersection of the Taxes, Eastern Region and January 1996 dimension values points to the financial data item value 5,565,146 in the database.
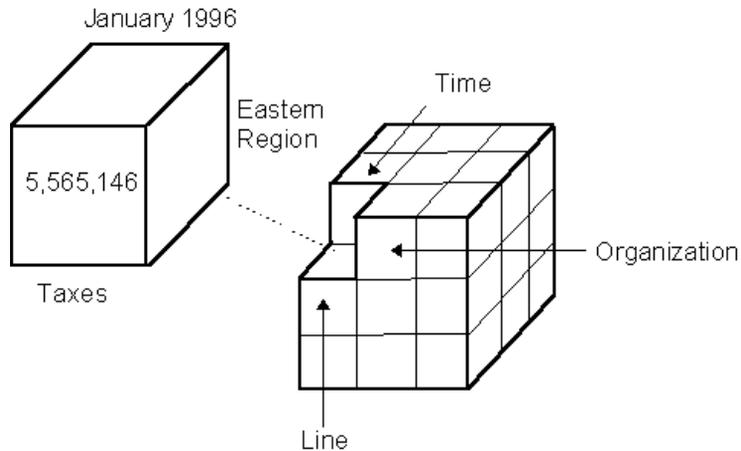
## Who can work with dimensions and dimension values?

### Administrators

As an administrator, it is your responsibility to maintain the dimensions and dimension values that your users access in the shared database that you administer. When you create or modify a dimension or dimension value and want other users to be able to access it, you must distribute the dimension or dimension value to the shared database and to other users.

### Budget workstation users

As a Budget workstation user, you can create and modify dimensions and dimension values for personal use. You can modify dimensions and dimension values that your administrator has created for you, but you cannot save the modifications unless you assign a new name to the modified dimension or dimension value, so that you retain the original. Also note that you cannot submit data to the shared database if is associated with a dimension or dimension value that you have created in your personal database.

# Creating and Modifying Dimensions

## Creating dimensions

You choose **Dimension** from the Maintain menu to create a new dimension. This opens the Maintain Dimension dialog box. From this starting point you can perform the following functions:

- Enter a name for the dimension. The name is used in reports, graphs, worksheets, and data entry forms.

- Enter an object name. The object name is the internal identifier by which the system references the dimension.

- Enter an object prefix.

- Choose the dimension type. You can choose **Text** or **Time**.

- Specify the maximum name length for dimension values that are part of this dimension.

## Assigning properties and user privileges to dimensions

Once a dimension has a name, object name, object prefix and type, you can specify whether the dimension supports the following types of operations:

- Aggregation of financial data over time.

- Whether the dimension supports best case and worst case variance reporting.

- Whether values for this dimension should be refreshed in each user's database according to the order specified in your (administrator) database.

- Whether the user can scale data associated with this dimension.

You can also specify the types of users who can create new hierarchies, models, or attributes based on this dimension. You can choose **DBA**, **EveryOne**, or **NoOne**.

**Important:** Base your selections on how the dimension will be used in the system. Refer to "Suggested Ways to Set Up Dimensions" on page 3-7 for an overview of typical ways in which dimensions are used in Financial Analyzer.

## Example: Dimension information

The following example shows the Maintain Dimension dialog box with information for the Product dimension.

In this example:

- The Product dimension maintains the same sort order as the administrator

- If scaling is supported by the financial data item that the dimension is part of, users will be able to scale date values associated with this dimension in reports

- All users can create hierarchies and attributes based on this dimension

- All users can create models using Product as the base dimension

## Modifying dimensions

You choose **Dimension** from the Maintain menu to modify dimensions in your personal database. This opens the Maintain Dimension dialog box, from which you can perform the following modifications:

- You can give a dimension a new name.

- You can delete a dimension from your personal database. As an administrator, you can also delete a dimension from the shared database by deleting it from your personal database, and then distributing this change to the shared database and to other users.

- You can modify the properties that have been assigned to a dimension. For more information, see "Assigning properties and user privileges to dimensions" on page 3-5.

- You can move a dimension to a new position in the list of dimensions maintained by the system.

- As an administrator, you can change the types of users who can create objects based on the dimension. For more information, see "Assigning properties and user privileges to dimensions" on page 3-5.

## Distributing a deleted dimension

If you delete a dimension, you must distribute the structure with a Delete from System action. This deletes the structure from the shared database and from the personal databases of all of your users, including any administrators immediately below you in the reporting hierarchy. Administrators below you in the reporting hierarchy should propagate this change by distributing the deletion to their shared database and to the personal databases of their users, and so on down to the leaf nodes. If they choose not to do so, they can retain the structure for their own use, but they can never submit data associated with the structure into your shared database.

### If you delete and then redefine a dimension

If you delete a dimension and then attempt to define a dimension with the same object name before distributing the deletion, the system prompts you to specify whether to process the deletion.

- If you indicate that the dimension is a new object that is intended to replace the deleted object, the system creates a system deletion task on the distribution list.

- If you indicate that the deletion was inadvertent, the system removes the deletion task from the distribution list, but any dimension values remain deleted. If you choose this option, it is your responsibility to redefine the dimension exactly as it was prior to the deletion. The system will not check for this.

### Related information

For more information about working with dimensions, search for the following topics in the Financial Analyzer Help system:

"Creating Dimensions"
"Modifying Dimensions"
"Moving Dimensions"
"Renaming Dimensions"
"Deleting Dimensions"

## Suggested Ways to Set Up Dimensions

### Using dimensions in models

When the data associated with a financial data item needs to be calculated, a model is defined using one or more of the dimensions that make up the financial data item. For example, models might be based on dimensions such as Line Item and Account. Dimensions that are used in models typically aggregate over time and do not require hierarchies because Financial Analyzer provides a Time hierarchy.

### Using dimensions in hierarchies

When the data associated with a financial data item needs to be aggregated into higher and lower levels of detail, a hierarchy is defined using one or more of the dimensions that make up the financial data item. For example, hierarchies might be

based on dimensions such as Organization and Product. Dimensions that are used in hierarchies typically do not aggregate over time and are not used in models.

## Using dimensions as attributes

When you need to establish a relationship between two dimensions for the purpose of selecting values of one dimension by their association with another dimension, an attribute can be defined to link them. Typically, the grouping dimension of an attribute is not used to dimension any financial data item, does not aggregate over time, is not used in a model, and does not require hierarchies.

## Using custom time dimensions

You can set up time periods using either the Standard Time dimension, or you can create a custom time dimension. A custom time dimension requires hierarchies to build time relationships.

## Suggested properties to assign when creating dimensions

The following table recommends the properties to assign to dimensions used in models, hierarchies, attributes, and custom time dimensions.

| Property | Dimension used in model | Dimension used in hierarchy | Dimension used as attribute | Custom time dimension |
|---|---|---|---|---|
| Dimension Type | Text | Text | Text | Time |
| Dimension Options | <ul><li>Time Aggregations</li><li>B/W Variance Indicators</li><li>Maintain DBA Sort Order</li><li>Control Dimension Value Scaling</li></ul> | Maintain DBA Sort Order | Maintain DBA Sort Order | Maintain DBA Sort Order |
| Users Who Can Define Hierarchies | <ul><li>DBA</li><li>EveryOne</li><li>NoOne</li></ul> | <ul><li>DBA</li><li>EveryOne</li></ul> | NoOne | <ul><li>DBA</li><li>EveryOne</li></ul> |

| Property | Dimension used in model | Dimension used in hierarchy | Dimension used as attribute | Custom time dimension |
|---|---|---|---|---|
| Users Who Can Define Models | ▪ DBA<br>▪ EveryOne | NoOne | NoOne | NoOne |
| Users Who Can Define Attributes | ▪ DBA<br>▪ EveryOne<br>▪ NoOne | ▪ DBA<br>▪ EveryOne | ▪ DBA<br>▪ EveryOne | NoOne |

# Creating and Modifying Dimension Values

## Creating dimension values

You choose **Dimension Value** from the Maintain menu to create a new dimension value. This opens the Maintain Dimension Value dialog box, where you choose the dimension for which you want to create the dimension value. From this starting point you can perform the following functions:

- Enter a name for the dimension value.

- Enter a dimension value name. The dimension value name is the internal identifier for by which the system references the dimension value.

- Specify the text for row and column labels.

- For a dimension value in a custom time dimension, select the time period. You can choose **Month**, **Quarter**, **Year**, or **Year-to-Date**.

- For a dimension value in a model dimension that supports aggregation, select an *aggregation type* for rolling up the data associated with the dimension value. You can choose one of the following:

    - Add month into quarters — Data for each month is added into quarterly totals. Used for line items on income statements.

    - First month only into quarter — Only the first month of the quarter is used in quarterly totals, or only the first month of the year is used in yearly totals. Used for line items on cash flow statements.

    - Last month only into quarter — Only the last month of the quarter is used in quarterly totals, or only the last month of the year is used in yearly totals. Used for line items on balance sheets.

- Average months into quarter — Values are averaged over the quarter or over the year. Used for line items such as Head Count.

- Average across time and org — Values are averaged over all organizations and over the quarter of the year. Used for line items such as Unit Price.

- Recalculate quarter — Values are recalculated at the end of the quarter or year, using the line item equation. Used for line items such as Return on Sales, which represents a ratio.

- Do not aggregate — Values for or dimension values marked with this aggregation type are removed from status before any rollups or worksheet spread operations are performed.

- For a dimension value in a dimension that supports best case and worst case variance reporting, specify the variance to use when displaying a financial data item involving a variance. You can choose **ACT** - **BUD** or **BUD** - **ACT**.

- For a dimension value in a dimension for which the Control Dimension Value Scaling property was selected when the dimension was created, you can disable numeric scaling.

**Note:** If you are creating a new dimension value that is similar to a saved dimension value, you can save time by copying information for row and column labels, time period, aggregation type, variance, and scaling from the saved value to the new value. Choose **Copy** in the New Dimension Value dialog box to copy dimension value information.

## Example: Dimension value information

The following example shows the Maintain Dimension value dialog box with information for a Product dimension value.



In this example:

- The dimension name is 110- Sentinel Standard

- The row label is Sentinel Standard

- The column label is Sent Std

- Aggregation Type is not applicable because the Product dimension does not aggregate over time

- Variance Type is not applicable because the Product dimension does not support best and worse case variance indicators

- Users can apply numeric scaling to this dimension value

## Modifying dimension values

You choose **Dimension Value** from the Maintain menu to modify dimension values. This opens the Maintain Dimension Value dialog box, from which you can choose the dimension and the dimension value and perform the following modifications:

- You can give a dimension value a new name.

- You can delete a dimension value from your personal database. As an administrator, you can also delete a dimension value from the shared database by deleting it from your personal database, and then distributing the change to the shared database and to other users.

- Edit row and column labels.

- You can move a dimension to a new position in the list of dimension values maintained by the system.

- For a dimension value in a custom time dimension, you can change the time period.

- For a dimension value in a dimension that supports aggregation over time, you can change the aggregation type.

- For a dimension value in a dimension that supports best case and worst case variance reporting, you can change the variance type.

- For a dimension value in a dimension for which the Control Dimension Value Scaling option was selected when the dimension was created, you can disable numeric scaling.

## If you delete and then redefine a dimension value

If you delete a dimension value and then attempt to define a dimension value with the same object name before distributing the deletion, the system prompts you to specify whether to process the deletion.

- If you indicate that the dimension value is a new object that is intended to replace the deleted object, the system creates a system deletion task on the distribution list.

- If you indicate that the deletion was inadvertent, the system removes the deletion task from the distribution list. If you choose this option, it is your responsibility to redefine the dimension value exactly as it was prior to the deletion. The system will not check for this.

## Related information

For more information about working with dimension values, search for the
following topics in the Financial Analyzer Help system:

"Creating Dimension Values"
"Modifying Dimension Values"
"Moving Dimension Values"
"Renaming Dimension Values"
"Deleting Dimension Values"

# 4

# Financial Data Items

## Chapter summary

This chapter describes how to create and maintain financial data items.

## Who should read this chapter

You need to know the information in this chapter if you are one of the following:

- An administrator who creates financial data items for personal use and for distribution to users of the shared database that you administer

- A Budget workstation user who creates financial data items for personal use and uses financial data items that have been distributed to you

- An Analyst workstation user who, although unable to create or maintain financial data items, wishes to gain a basic understanding of financial data items

## List of topics

This chapter includes the following topics:

- About Financial Data Items

- Creating Financial Data Items

- Specifying How Sparse Data is Handled in Financial Data Items

- Specifying Dimension Order for Financial Data Items

- Modifying Financial Data Items

- Copying Data in Financial Data Items

# About Financial Data Items

## Definition: Financial data items

Financial data items are database objects that are used to store or calculate financial data values. There are two types of financial data items:

- *Stored financial data items,* which are used to store values

- *Formula financial data items,* which are used to calculate values

## Stored financial data items

A stored financial data item can accept data in the following ways:

- You can enter the data manually using a worksheet or a data entry form

- You can enter the data using a data loading program

- You can copy the data into one financial data item from another financial data item

## Formula financial data items

A formula financial data item contains a formula that calculates values based on the values of one or more stored financial data items. For example, you might create a formula financial data item called Budget Variance whose values reflect the difference between two stored financial data items, Actuals and Budget.

The values of a formula financial data item are calculated and displayed in a report or graph that includes the financial data item. Because the values are based on another financial data item, whose values may change, the values of a formula financial data item are not permanently stored in the system. They are calculated based on their associated stored financial data items.

## Types of formula financial data items

There are two types of formula financial data items:

- Formula Manual — The value of the financial data item is dynamically calculated using a formula in which the data's dimensionality is specified by the user

- Formula Automatic — The financial data item's value is dynamically calculated using a formula in which the data's dimensionality is automatically determined from a stored financial data item

## Who can work with financial data items?

### Administrators

As an administrator, it is your responsibility to maintain the financial data items that your users access in the shared database that you administer. When you create or modify a financial data item and want other users to be able to access it, you must distribute the financial data item to the shared database and to other users.

### Budget workstation users

As a Budget workstation user, you can create and modify financial data items for personal use. You can modify financial data items that your administrator has created for you, but you cannot save the modifications unless you assign a new name to the modified financial data item and retain the original. Also note that you cannot submit data to the shared database if it is associated with a financial data item that you have created in your personal database.

# Creating Financial Data Items

## Adding financial data items

You choose **Financial Data Item** from the Maintain menu to create a new financial data item. This opens the Financial Data Item dialog box. From this starting point you can perform the following functions:

- Name the financial data item.

- Specify the data type for the financial data item. You can choose **Integer,** S**hortinteger Decimal**, **Shortdecimal**, or **Text**.

- Specify the type of financial data item. You can choose **Stored**, **Formula Manual**, or **Formula Automatic**.

- For a stored or Formula Manual financial data item, specify the order of the dimensions. For more information, see "Specifying Dimension Order for Financial Data Items" on page 4-10.

- For a formula data item, enter the formula. For more information, see "Examples: Formula financial data items" on page 4-5.

- For a stored financial data item for which data is sparse, you can specify how to handle sparse data. For more information, see "Specifying How Sparse Data is Handled in Financial Data Items" on page 4-9.

- Enable or disable numeric scaling.

- Specify the text for row and column labels.

- If you are an administrator, you can also perform the following tasks:

  - Specify if the data associated with the financial data item will be available for distribution to users.

  - Associate a solve definition or group solve definition with the financial data item. For more information, see "Associating solve definitions with financial data items" on page 9-9.

## Example: Stored financial data item

The following example shows the Maintain Financial Data Item dialog box with information for a stored financial data item, Actuals.
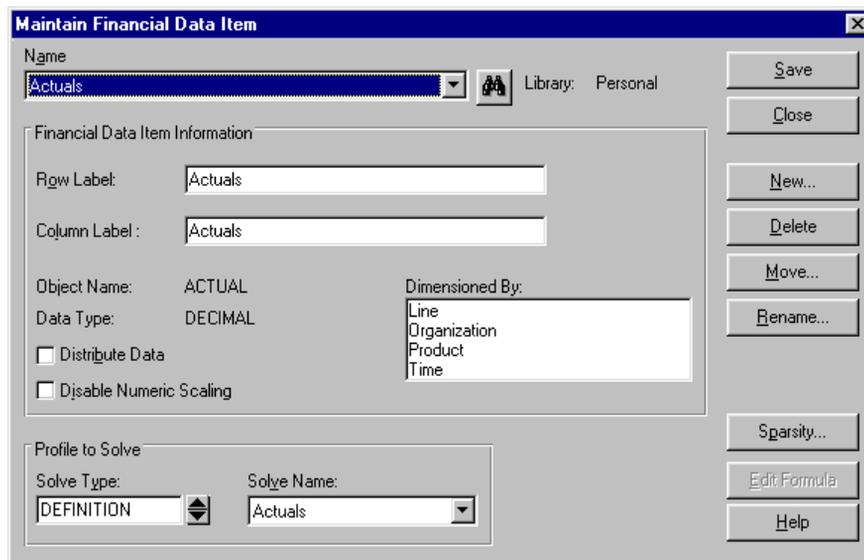
## Examples: Formula financial data items

### Example 1: Budget variance financial data item

The following example illustrates a formula financial data item that calculates the variance between a financial data item called Budget and a financial data item called Actuals. Both of these financial data items are dimensioned by Time, Line and Organization.

The formula, located in the Formula box, is:

```
(act-bud)*line.bw
```

where:

- `act` is the object name of the financial data item Actuals.

- `bud` is the object name of the financial data item Budget.

- `line.bw` specifies the Line dimension, which includes a B/W Variance Indicator. When you create a dimension that includes support for a B/W Variance Indicator, a .BW object is created in the database.

Using line.bw in the formula allows the signage of the variance to be correctly displayed.

The Budvar financial data item would appear in a report, as shown following. The negative variance that results from using line.bw in the formula is displayed in parentheses.



| | Actuals | Budget | Budget Variance |
|---|---|---|---|
| Total Assets | 140,920,588.63 | 79,469,725.18 | 61,450,863.45 |
| Accounts Receivable | 45,849,968.60 | 24,613,664.84 | 21,236,303.76 |
| Total Liabilities | 45,049,953.53 | 24,771,744.38 | (20,278,209.15) |
| Total Stockholders Equity | 95,870,635.10 | 54,697,980.80 | 41,172,654.30 |
| Total Revenue | 179,808,893.05 | 64,453,843.96 | 115,355,049.09 |
| Cost of Sales and Services | 97,165,484.85 | NA | (97,165,484.85) |
| Total Expense | 80,211,177.76 | 83,425,331.03 | 3,214,153.27 |
| Total Operating Expenses | 55,946,236.70 | 88,725,825.76 | 32,779,589.06 |
| Statistical and Intercompany ... | 3,598.61 | 3,608.18 | 9.57 |
| Net Income | 17,283,164.99 | (17,188,962.71) | 34,472,127.70 |

Budget Variance Report — US- Global Computers — January 2000

### Example 2: Calculating line item as a percentage of revenue

The following example illustrates a formula financial data item that calculates every Line Item as a percentage of the Revenue Line Item for the financial data item Actuals for every Time and Organization.

The formula, located in the Formula box, is:

```
act/act(line'A4000')*100
```

where:

- act is the object name for the financial data item Actuals
- line is the internal identifier representing the Line dimension
- A4000 is the internal identifier representing the Revenue line item

Thus, act (line'A4000') represents the Revenue line item for every dimension that makes up the Actual financial data item.

**New Financial Data Item**

Name:
As a Percent of Revenue

[ ] Copy from: Budget Variance

Object Name:
PERCREV

Data Type:

[ OK ]
[ Cancel ]
[ Help ]

**Financial Data Item Type**
○ Stored    ○ Formula Manual    ⦿ Formula Automatic

**Dimensions**

Available:
Year
Time
Line
Product
Product Line

Assigned:

[ >> ]
[ << ]

[ Sparsity... ]

Formula:
act/act(line 'A4000')*100

The following report shows the results of this calculation.

| Percent of Revenue | | |
|---|---|---|
| Organization (1) | | Time (1) |
| | | FinData (2) |

**Percent of Revenue**

| US- Global Computers ▾ | January 2000 | |
|---|---|---|
| | Actuals | PCTREV |
| –   Total Revenue | 179,808,893 | 100.00% |
| Hardware Revenue | 119,458,116 | 66.44% |
| –   Support Revenue | 8,853,524 | 4.92% |
| Support- Initial | 2,232,135 | 1.24% |
| Support- Renewal | 6,621,389 | 3.68% |
| Consulting Revenue | 40,815,354 | 22.70% |
| Training Revenue | 8,196,266 | 4.56% |
| Miscellaneous Revenue | 2,485,633 | 1.38% |

Line (8)

## Related information

For more information on creating financial data items, see the following topic in the Financial Analyzer Help system: "Creating Financial Data Items."

# Specifying How Sparse Data is Handled in Financial Data Items

## Definition: Sparse data

Sparse data occurs when many data cells in a financial data item contain NA values. For example, if a financial data item contains information that is dimensioned by Product and Market, it is likely that the data will be sparse because not all products are sold in all markets.

## Methods for specifying how sparse data is handled

There are two methods for specifying how sparse data is handled in a Financial Analyzer database:

- Sparsity Wizard — An automated utility that leads you through the process of defining sparsity according to a predefined set of "best practice" guidelines. The Sparsity Wizard is particularly useful if you are working with a composite dimension, which combines the values of two or more dimensions.

- Advanced method — Displays the dimensions in the financial data item and enables you to designate a dimension as sparse.

When you choose **Sparsity** in the Maintain Financial Data Item dialog box, you are prompted to choose the method that you want to use.

**Note:** If you are not an experienced user, Oracle Corporation recommends that you use the Sparsity Wizard. If you select a dimension for sparse data handling that is not actually sparse, you may experience increased data access time and decreased data processing performance.

# Specifying Dimension Order for Financial Data Items

## Importance of dimension order for financial data items

When you create a stored financial data item, you must pay attention to the order in which you select the dimensions that comprise the financial data item. The dimension order determines how data is stored in Financial Analyzer, which in turn affects performance and storage in the Financial Analyzer database.

## Recommendations for dimension order for financial data items

The order that you specify for the dimensions in your financial data items should depend on whether the data in the financial data item is dense or sparse.

### Dimension order recommendation for dense data

When data is dense, the Time dimension should be the last dimension in the financial data item definition.

### Dimension order recommendations for sparse data

When data is sparse, Oracle Corporation recommends that you follow these guidelines:

- You must have at least one dense dimension.

- Place dense dimensions first in the financial data item's definition.

- The Time dimension should always be a dense dimension.

- If you have more than one dense dimension (one of them being Time), the Time dimension can either be the last of the dense dimensions or the last of all dimensions.

  - If you will be consistently processing one period's data at a time for a financial data item, placing the Time dimension last may improve load and solve performance.

  - If you will be consistently processing a time series, placing the Time dimension last of the dense dimensions may improve load and solve performance.

- Dimensions identified as sparse should be ordered according to their number of dimension values, with dimensions with more values coming before those with less. For example, if a financial data item has four dimensions: Account Organization, Product, and Time, and the relationship between Account, Organization, and Product is sparse, then the order of the dimensions should be:

  ```
  <Time <Account Organization Product>>
  ```

  where Account, Organization, and Product are in the composite.

  If a financial data item has four dimensions: Account, Organization, Product, and Time, and only the relationship between Organization and Product is sparse, then the order of the dimensions could be:

  ```
  <Account Time <Organization Product>>
  ```

  where Organization and Product are in the composite. Also, one period's data is typically loaded and solved at once.

  Alternatively, the order of the dimensions could be

  ```
  <Account <Organization Product> Time>
  ```

  where Organization and Product are in the composite. Also, one period's data is typically loaded and solved at once.

# Modifying Financial Data Items

## About modifying financial data items

You choose **Financial Data Item** from the Maintain menu to modify financial data items in your personal database. This opens the Maintain Financial Data Item dialog box, from which you can perform the following functions:

- You can give a financial data item a new name.

- You can delete a financial data item from your personal database. As an administrator, you can also delete a financial data item from the shared database by deleting it from your personal database, and then distributing this change to the shared database. For more information, see "Distributing a deleted financial data item" on page 4-15.

- You can specify that a financial data item is sparse, or change the way in which sparse data is handled for a financial data item. For more information, see "Modifying how sparse data is handled in financial data items" on page 4-12.

- You can modify the formula for a formula financial data item.

- As an administrator, you can associate a financial data item in the shared database with a solve definition or a group solve definition. This enables the solve or group solve to run automatically when users modify data for the financial data item in the shared database. For more information, see "Associating solve definitions with financial data items" on page 9-9.

- As an administrator, you can change the setting for distributing data for the financial data item.

- You can move a financial data item to a new position in the list of financial data items maintained by the system.

- Edit row and column labels.

## Modifying how sparse data is handled in financial data items

### When to modify sparse data handling for financial data items

Changing the way sparse data is handled can have a dramatic impact on the performance of your database. Oracle recommends that you modify sparse data handling after careful analysis of the dimensions and financial data in your database.

Reasons to change the way sparse data is handled on your system include the following:

- You want to reduce the amount of storage required for your database

- You want to improve data access time

- You want to improve data processing performance

### Example: When to modify sparse data handling for financial data items

In this example:

- The financial data item called Budget is dimensioned by Time, Line, Product and Organization.

- All Organizations have non-product specific data, but only the Sales Organization has data for every product. Therefore, the data is sparse in the Organization and Product dimensions.

The following report shows the Budget financial data item. Note the number of NAs, indicating sparse data.

| Year 1998<br>Total Operating Expenses<br>Budget | Resource | Sales | Engineering | Finance | HR & Admin Rollup |
|---|---|---|---|---|---|
| Sentinel Rollup | NA | 39,981,676 | NA | NA | NA |
| Envoy Rollup | NA | 19,523,378 | NA | NA | NA |
| Operating System Rollup | NA | 10,806,417 | NA | NA | NA |
| Monitor Rollup | NA | 3,061,897 | NA | NA | NA |
| PCMCIA Accessory Rollup | NA | 505,470 | NA | NA | NA |
| Speaker Rollup | NA | 297,158 | NA | NA | NA |
| Networking Rollup | NA | 1,509,215 | NA | NA | NA |
| Non Product Specific | 48,589,751 | 191,612,488 | 228,504,702 | 135,959,313 | 21,162,292 |

**Note:** When you modify sparsity, reports and worksheets do not change; your NA values still appear. This report is shown to demonstrate the concept of a sparsely populated dimension.

If the financial data item in this example was created without changing how sparsity is handled, all of the NA values would be stored in the database, as shown in the following illustration.

**Time**
Year 1998

**Line**
Profit
Total Revenue
Total Operating
Expenses

**Product**

| Resource | Sales | Engineering | Finance | HR & Admin | |
|---|---|---|---|---|---|
| NA | 39.9M | NA | NA | NA | Sentinel Rollup |
| NA | 19.5M | NA | NA | NA | Envoy Rollup |
| NA | 10.8M | NA | NA | NA | Operating System Rollup |
| NA | 3.0M | NA | NA | NA | Monitor Rollup |
| NA | .5M | NA | NA | NA | PCMCIA Accessory Rollup |
| NA | .2M | NA | NA | NA | Speaker Rollup |
| NA | 1.5M | NA | NA | NA | Networking Rollup |
| 48.5M | 191.6M | 228.5M | 135.9M | 21.1M | Non Product Specific |

Resource    Sales    Engineering    Finance    HR & Admin

**Organization**

If, however, the dimensions Product and Organization were defined as sparse dimensions when the financial data item was created, the NA values would not be stored, as shown in the following illustration.
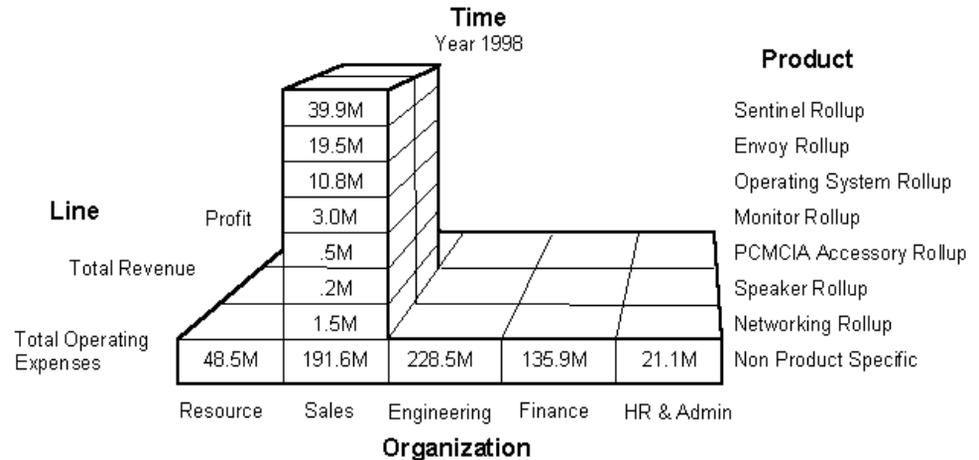


In this example, you would want to modify sparsity handling so that Product and Organization are sparse dimensions.

### Distributing a financial data item for which sparse data handling has been modified

If you distribute a financial data item for which sparse data handling has been modified, it may take some time to process because the data within the financial data item has to be reassigned in the database.

## Distributing a deleted financial data item

If you delete a financial data item, you must distribute the structure with a Delete from System action. This deletes the structure from the shared database and from the personal databases of all of your users, including any administrators immediately below you in the reporting hierarchy. Administrators below you in the reporting hierarchy should propagate this change by distributing the deletion to their shared database and to the personal databases of their users, and so on down to the leaf nodes. If they choose not to do so, they can retain the structure for their own use, but they can never submit data associated with the structure into your shared database.

### If you delete and then redefine a financial data item

If you delete a financial data item and then attempt to define a financial data item with the same object name before distributing the deletion, the system prompts you to specify whether to process the deletion.

■ If you indicate that the dimension is a new object that is intended to replace the deleted object, the system creates a system deletion task on the distribution list.

■ If you indicate that the deletion was inadvertent, the system removes the deletion task from the distribution list. If you choose this option, it is your responsibility to redefine the financial data item exactly as it was prior to the deletion. The system will not check for this.

### Related information

For more information about maintaining financial data items, search for the following topics in the Financial Analyzer Help system:

"Deleting Financial Data Items"
"Deleting Structures from the System"
"Editing Formulas Used to Calculate Financial Data Items"
"Moving Financial Data Items"
"Renaming Financial Data Items"
"Setting Sparsity"

## Copying Data in Financial Data Items

### About the Copy Data feature

The copy data feature enables you to copy data from one financial data item to another. You can use the copy data process as a mechanism for moving data from one financial data item to another, or you can make use of a set of options that allow you to modify the data in addition to copying it.

You can use Financial Analyzer's copy data feature to perform the following types of tasks:

■ Restructuring the data in your database

■ Rolling up data from one time period to another

■ Increasing the values in a slice of data by a percentage or absolute amount

■ Setting a slice of data to NA, thereby effectively deleting it

- Creating a new budget based on the previous year's budget data

- Updating a budget to reflect a change in allocations

- Generating multiple what-if scenarios from a single source

## Who can use the copy data feature?

### Administrators

An administrator can copy data within his or her personal database, or between the personal database and the shared database.

The Operational Mode in the Options dialog box indicates how the data is copied. If the Operational Mode is set to **Administrator**, data is copied within the administrator's personal database. If the Operational Mode is set to **Workstation**, data is submitted to the Task Processor and copied within the administrator's shared database.

### Budget workstation users

Users of Budget workstations can copy data only within their personal database.

## Using the Copy Data Feature

You choose **Copy Data** from the Tools menu to copy data. This opens the Copy Data dialog box, where you specify the source financial data item and the target financial data item and select the dimension values that you want to copy.

In some cases, the source and target items are different. For example, when you are populating a new financial data item with data from an existing item, the source and target are different. In other cases, the source and target items are the same, such as when you are altering the data within a single financial data item.

Note that you can increase or decrease the data by a specific amount or percentage when it is copied from the source to the target. Alternatively (when the source and target are the same), you can set the data values to N/A, effectively deleting the data from the financial data item.

## Example: Using the copy data feature

The following illustration shows the Copy Data dialog box with specifications to copy data from the Budget financial data item for one time period to the Budget financial data item for another time period, with an increase of 5%.



## Using copy data profiles

If you periodically copy the same data, you can save the information as a *copy data profile.* A copy data profile captures the selection information in the Copy Data dialog box and saves it for reuse. You can apply the saved profile at a later time — either exactly as is, or as a template for copying similar data.

To name and save a copy data profile, define the data slice to copy and choose **Save Profile** in the Copy Data dialog box. To retrieve a list of saved profiles, choose **Profiles**.

## Related information

For more information about using the Copy Data feature, search for the following topics in the Financial Analyzer Help system:

"Creating a Copy Data Profile"
"Modifying Data in Financial Data Items"
"Setting Data to NA"
"Using a Copy Data Profile"

# 5

# Hierarchies

## Chapter summary

This chapter describes how you can create and use hierarchies in the Financial Analyzer environment.

## Who should read this chapter

You need to know the information in this chapter if you are:

- An administrator who creates hierarchies for personal use and for distribution to users in the shared database that you administer

- A Budget workstation user who creates hierarchies for personal use and uses hierarchies that have been distributed to you

- An Analyst workstation user who, although unable to create or maintain them, wishes to gain a basic understanding hierarchies

## List of topics

This chapter includes the following topics:

- About Hierarchies

- Hierarchy Structures

- Creating and Modifying Hierarchies

# About Hierarchies

## Definition: Hierarchies

Hierarchies are tree-like organizational structures that you can use to relate the values of dimensions in your database. Hierarchies enable the data associated with dimension values to be aggregated at various levels along the structure. Dimensions that are associated with hierarchies in this way are called *embedded total dimensions* because the levels of aggregation are embedded in the dimension's values. Typically, these dimensions include Time, Product, and Organization, but you can define hierarchies for any dimension in your system.

For more information about dimensions and dimension values, refer to Chapter 3.

## Who can work with hierarchies?

### Administrators

As an administrator, it is your responsibility to maintain the hierarchies that your users access in the shared database that you administer. When you create or modify a hierarchy and want other users to be able to access it, you must distribute the hierarchy to the shared database and to other users.

### Budget workstation users

As a Budget workstation user, you can create and modify hierarchies for your own personal use. You can modify hierarchies that your administrator has created for you, but you cannot save the modifications unless you assign a new name to the modified hierarchy, retaining the original.

# Hierarchy Structures

## Typical hierarchy structure

A typical hierarchy is organized in a tree-like structure with one value at the top of the tree and multiple values branching out from the top.

The following illustration shows a typical hierarchy.
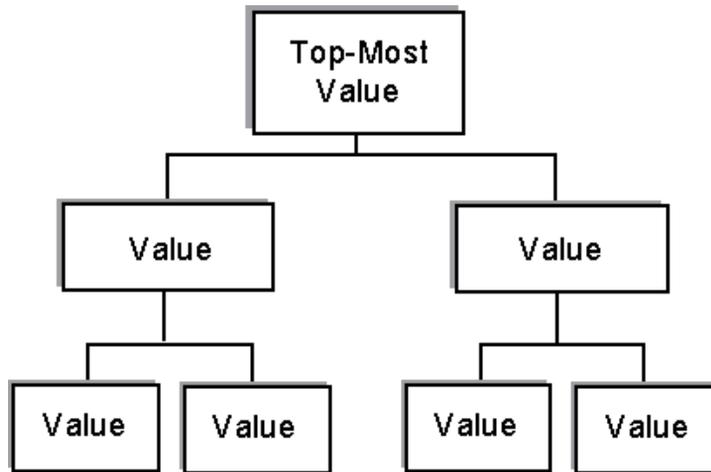


## Parent and child values

The relationships between the various values are referred to as though they were part of a family tree. Each dimension value in a hierarchy (except the top-most value) has a *parent* value, which is the value directly above it in the structure. The dimension values directly below a parent are called its *children*.
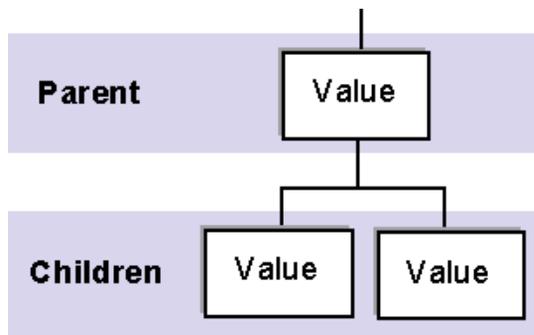


## Sibling values

Each parent value can have any number of children. Dimension values that have the same parent are called *siblings*.

The following illustration shows siblings in a hierarchy.
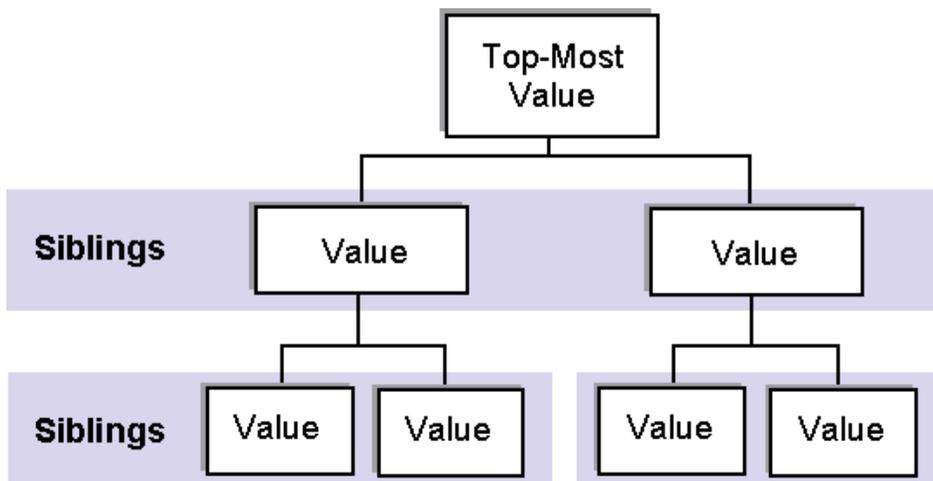


## Descendant and ancestor values

Each child value can also have children of its own, and so on. Multiple levels of dimension values that roll up to a common value are called *descendants* of that value, and the value itself is known as the *ancestor* of the descendent values.
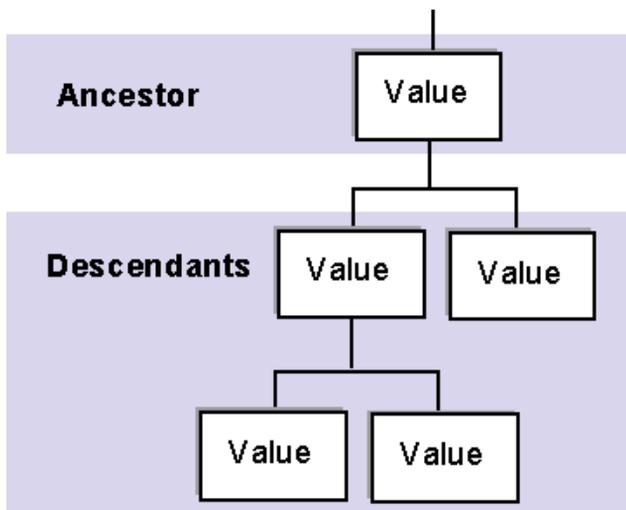
## Leaf values

In a hierarchy, any dimension value that has no children is called a *leaf* dimension value.

Leaf dimension values are the only dimension values for which you can input data for a hierarchy. The data for each non-leaf dimension value is consolidated from its children.
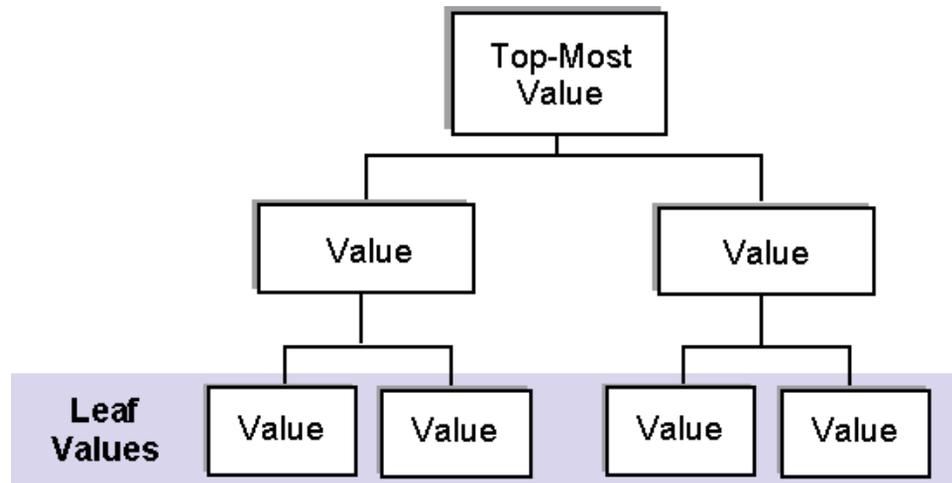


## Example: Hierarchy structure

This example illustrates a sample hierarchy for the Organization dimension for a fictitious company, US Global Computers. In this diagram:

- All of the divisions (East, Central, West) at the bottom of the hierarchy are leaf organizations, as are the values Support and Training.

- Data for the Support, Consulting and Training divisions will roll up into Sales data, and Resource, Manufacturing, Sales, and Finance data will roll up into corporate data for US Global Computers.

The following diagram illustrates a sample hierarchy that is based on the Organization dimension.
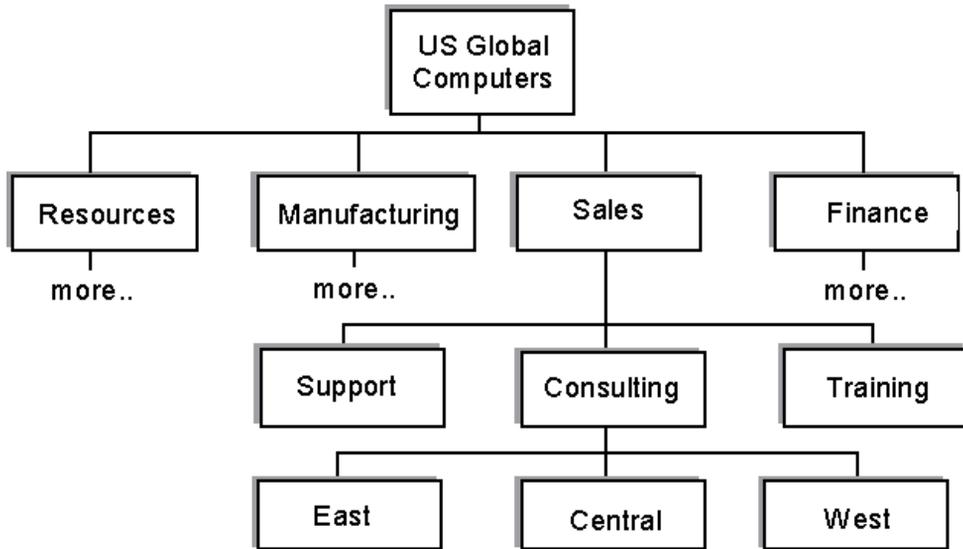


## Using dimension values in multiple hierarchies

Financial Analyzer supports multiple hierarchies. This means that you can specify any number of hierarchies for rolling up data. For example, you might want to define separate hierarchies for examining management and functional data.

In most hierarchies, any dimension value that is not the top-most can have only one parent. However, if that dimension value belongs to more than one hierarchy, it can have a different parent in each hierarchy.

## Example: Using dimension values in multiple hierarchies

In this example, there are two hierarchies, each representing a different type of computer system.

■ The Sentinel Standard hierarchy contains the dimension values Monitor and System Software

- The Sentinel Multimedia hierarchy contains the dimension value Fax/Modem, as well as Monitor and System Software
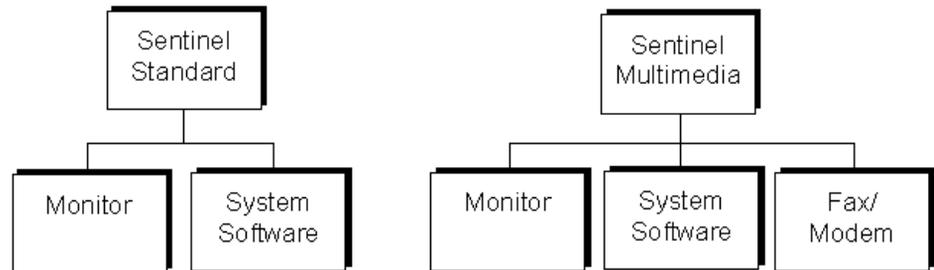


In the Selector, these would appear as separate product hierarchies that you can choose from to use in a report or worksheet:
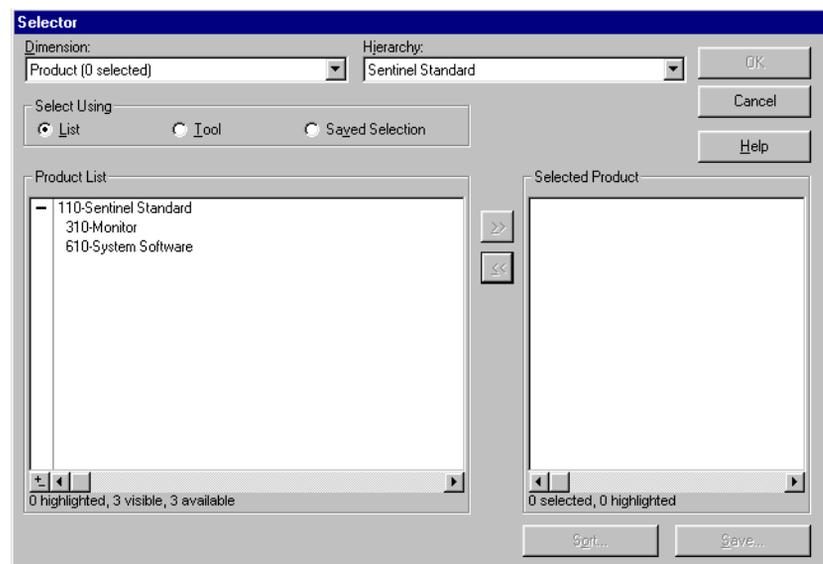


## Multiple top-level parents in the same hierarchy

You can create a hierarchy that has more than one top-level parent. Specifying a hierarchy with more than one top-level value can be useful when working with time-related dimensions.

## Example: Multiple top-level parents in the same hierarchy

In this example, 1999 and 2000 are top level parents in the Application Time hierarchy.

```
┌──────────┐          ┌──────────┐
│   1999   │          │   2000   │
└────┬─────┘          └────┬─────┘
     │  ┌────────┐         │  ┌────────┐
     ├──│  1Q99  │         ├──│  1Q00  │
     │  └────────┘         │  └────────┘
     │  ┌────────┐         │  ┌────────┐
     ├──│  2Q99  │         ├──│  2Q00  │
     │  └────────┘         │  └────────┘
     │  ┌────────┐         │  ┌────────┐
     ├──│  3Q99  │         ├──│  3Q00  │
     │  └────────┘         │  └────────┘
     │  ┌────────┐         │  ┌────────┐
     └──│  4Q99  │         └──│  4Q00  │
        └────────┘            └────────┘
```
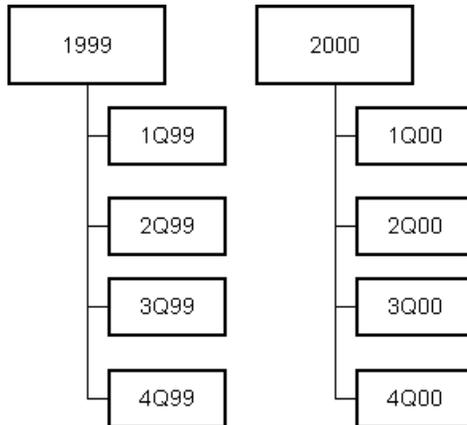
In the Selector, 1999 and 2000 appear as top level parents in the Application Time hierarchy. Notice that these values are *siblings,* and there are no higher level values in the hierarchy.
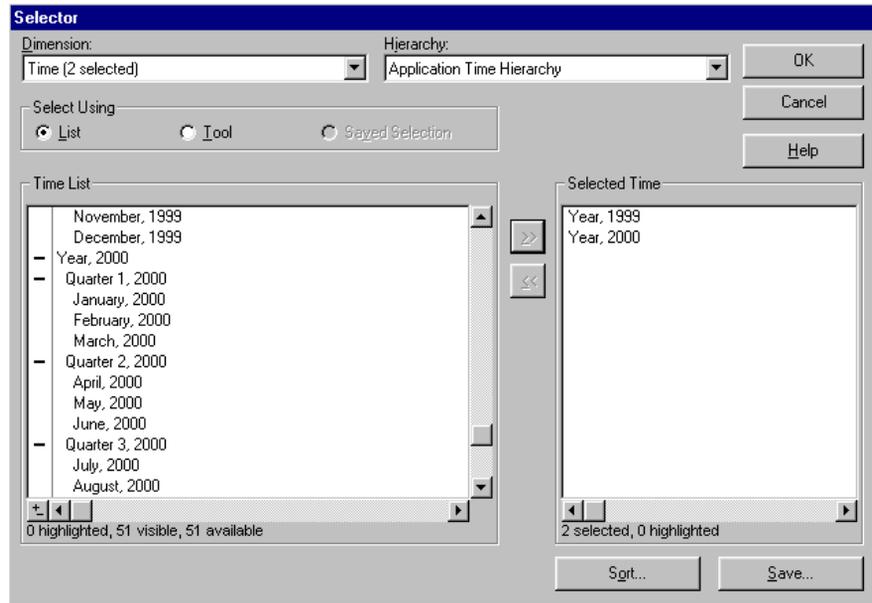


## Creating and Modifying Hierarchies

### Creating hierarchies

You choose **Hierarchy** from the Maintain menu to create a new hierarchy. This opens the Maintain Hierarchy dialog box. From this starting point you can perform the following functions:

- Enter a name for the hierarchy. The name is the external identifier for the hierarchy.

- Enter the base dimension for the hierarchy. The object name is the internal identifier for the hierarchy.

- Choose the dimension values that comprise the hierarchy.

- Specify the position of each dimension value within the hierarchy.

## Example: Hierarchy information

The following example shows the Maintain Hierarchy dialog box with information for a Product hierarchy.
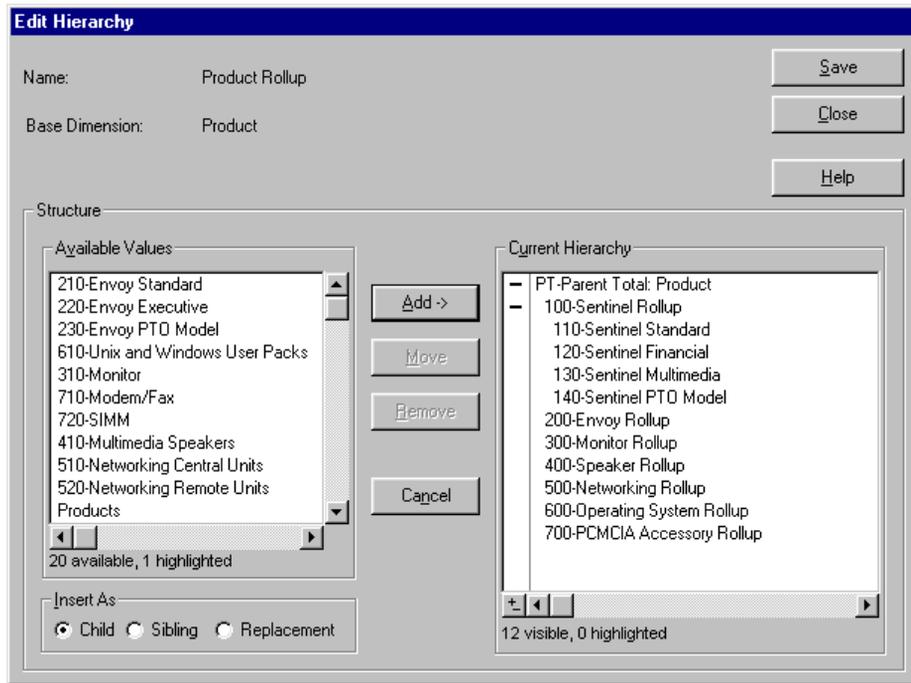


## Modifying hierarchies

You choose **Hierarchy** from the Maintain menu to modify hierarchies. This opens the Maintain Hierarchy dialog box, from which you can perform the following maintenance functions:

- You can edit a hierarchy by adding dimension values or removing dimension values.

- You can give a hierarchy a new name.

- You can move a hierarchy to a new position in the list of hierarchies maintained by the system.

- You can delete a hierarchy from your personal database. As an administrator, you can also delete a hierarchy from the shared database by deleting it from

your personal database, and then distributing this change to the shared
database.

## Related information

For more information about working with hierarchies, refer to the following topics
in the Financial Analyzer Help system:

"Creating Hierarchies."
"Deleting Hierarchies"
"Editing Hierarchies"
"Moving Hierarchies"
"Renaming Hierarchies"

# 6

# Attributes

## Chapter summary

This chapter describes how to create and work with attributes.

## Who should read this chapter

You need to know the information in this chapter if you are:

- An Administrator who creates attributes for personal use and for distribution to other users of the shared database that you administer

- A Budget workstation user who creates attributes for personal use and uses attributes that have been distributed to you

- An Analyst workstation user who, although unable to create or maintain them, wishes to gain a basic understanding of attributes

## List of topics

This chapter includes the following topics:

- About Attributes

- Attribute Types

- Creating and Modifying Attributes

# About Attributes

## Definition: Attributes

Attributes establish relationships between the values of two dimensions in such a way that the values of one dimension (a grouping dimension) can be used to group multiple values of the other dimension (a base dimension). Each value of the grouping dimension serves as a characteristic, or attribute, that applies to multiple values of the base dimension.

## Using attributes

Attributes facilitate the process of selecting data for documents. When selecting data by attribute, you can choose any number of values of the base dimension by specifying a single value of the grouping dimension. This eliminates the need to specify each value of the base dimension in a separate operation.

## Grouping options

You can create attributes that group related data in many different ways, such as by product type, by time period, or even by user. For example, an administrator could create an attribute called BudgetWest that includes all Budget workstation users in the West division. The administrator could then distribute data specific to Budget Workstation users in the West division, without having to select them all individually.

## Who can work with attributes?

### Administrators

As an administrator, it is your responsibility to maintain the attributes that your users access in the shared database that you administer. When you create or modify an attribute and want other users to be able to access it, you must distribute the attribute to the shared database and to other users.

### Budget workstation users

As a Budget workstation user, you can create and modify attributes for your personal use. You can modify attributes that your administrator has created for you, but you cannot save the modifications unless you assign a new name to the modified attribute, retaining the original.

# Attribute Types

## Overview

Financial Analyzer supports two types of attributes:

- One-to-many — A relationship where multiple values of a base dimension are related to a single value of a grouping dimension.

- Many-to-many — A relationship where multiple values of a base dimension are related to multiple values of a grouping dimension.

## One-to-many attributes

One-to-many attributes:

- Establish a relationship between the values of two dimensions where each value of a grouping dimension is related to multiple values of a base dimension.

- Simplify the process of selecting data by enabling you to specify a single value of the grouping dimension to select many values of the base dimension.

## Example: One-to-many attribute

In this example:

- Products are either workstations or components.

- The grouping dimension is Unit Type.

- The grouping dimension value Workstation is related to the base dimension values Sentinel Standard and Envoy Standard.

- The grouping dimension value Component is linked to the base dimension values Monitor and Modem/Fax.

You can select a subset of Product by specifying either Workstation or Component.
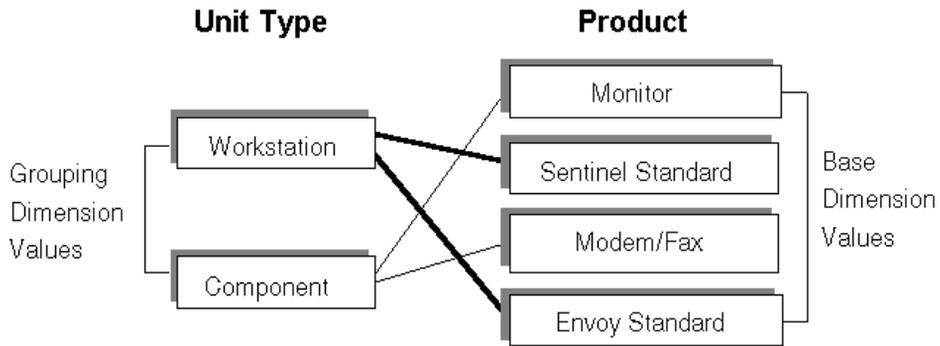


## Many-to-many attributes

Many-to-many attributes:

- Establish a relationship between the values of two dimensions where multiple values of a grouping dimension are related to multiple values of a base dimension.

- Simplify the process of selecting data by enabling you to specify a single value of the grouping dimension to select many values of the base dimension.

- Provide an additional feature for refining your data selection; because the base dimension values can be linked to multiple values of the grouping dimension, the grouping dimension values provide a *context* for selecting data.

## Example: Many-to-many attribute

In this example:

- Products are displayed, along with possible types of monitors available for each.

- The grouping dimension is Monitor Type Availability.

- The grouping dimension value VGA is linked to Sentinel Standard, Sentinel Multimedia, and Envoy Standard.

- The grouping dimension value Super VGA is linked to Sentinel Financial, Sentinel Multimedia, and Envoy Standard.

- The Products Sentinel Multimedia and Envoy Standard are related to both types of Monitor Availability because they are available with either VGA or Super VGA monitors.

You can select the value Sentinel Multimedia in terms of the context in which you want to view or analyze it: as part of your VGA workstations, or as part of your Super VGA workstations.
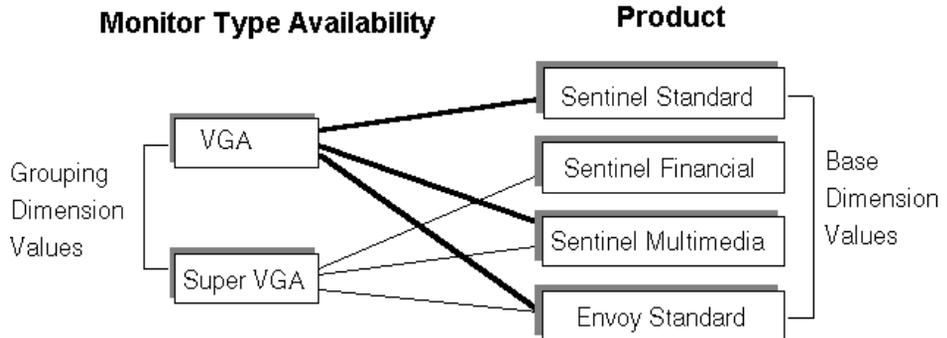


# Creating and Modifying Attributes

## Creating attributes

You choose **Attribute** from the Maintain menu to create an attribute. This opens the Maintain Attribute dialog box. From this starting point, you can perform the following functions:

- Name the attribute.

- Specify the attribute type. You can choose **One-to-Many** or **Many-to-Many**.

- Select the dimension whose values are to form the basis of the attribute.

- For a one-to -many attribute, select the grouping dimension for the attribute. This is the dimension whose values you want to associate with the base dimension.

- For a many-to-many attribute, select the second dimension for the attribute.

When you choose **OK**, the Edit Attribute dialog box appears. Here, you select dimension values for the dimensions in the attribute definition. You also set the relationships between the dimension values.

- For a one-to-many attribute, you set the relationships between the selected aggregate and base dimension values.

- For a many-to-many attribute, you set the relationships between the value of the first dimension and the value of the second dimension.

## Example: Relationships for one-to-many attribute

The following illustration shows an example of the Edit Attribute dialog box with information for a one-to-many attribute, Product by Unit Type.
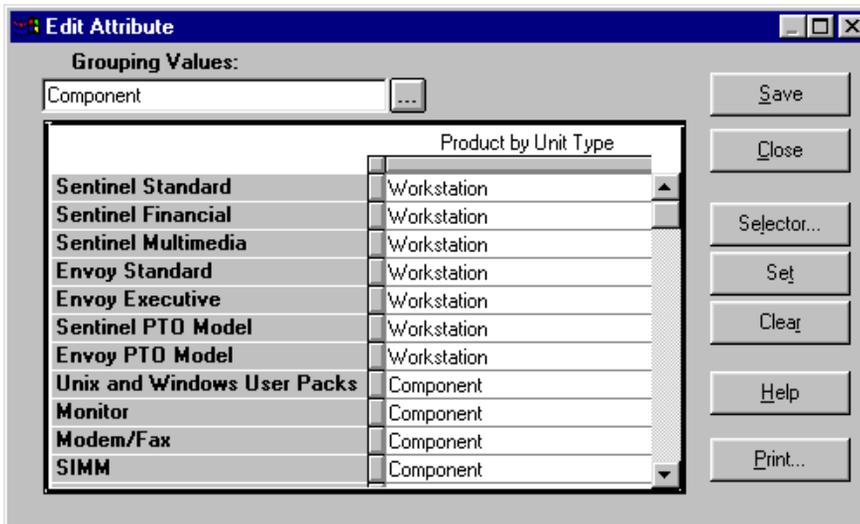
## Example: Relationships for many-to-many attribute

The following illustration shows an example of the Edit Attribute dialog box with information for a many-to-many attribute, Product by Monitor Type Availability.
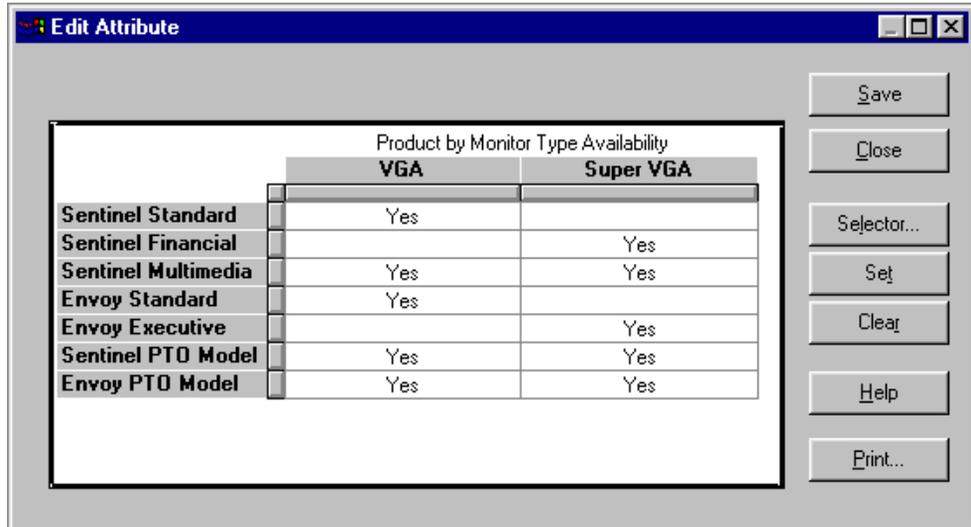


## Modifying attributes

You choose **Attributes** from the Maintain menu to modify information for attributes. This opens the Maintain Attributes dialog box, from which you can perform the following functions:

- You can give an attribute a new name.

- You can delete an attribute from your personal database. As an administrator, you can also delete an attribute from the shared database by deleting it from your personal database, and then distributing this change to the shared database.

- You can move an attribute to a new position in the list of attributes maintained by the system.

- You can edit the links between dimension values.

## Related information

For more information about working with attributes, search for the following topics in the Financial Analyzer Help system:

"Creating a Many-to-Many Attribute"
"Creating a One-to-Many Attribute"
"Deleting Attributes"
"Editing Many-to-Many Attributes"
"Editing a One-to-Many Attributes"
"Renaming Attributes"

# 7

## Selecting Data

## Chapter summary

This chapter describes how to select dimension values.

## Who should read this chapter

All Financial Analyzer users should read this chapter.

## List of topics

This chapter includes the following topics:

- About Data Selection
- Selecting Values

# About Data Selection

## Definition: Selector

The ability to select the precise information that you want to work with is a key feature of Financial Analyzer. A data selection tool, referred to as the *Selector*, supports the data selection function. The Selector:

- Gives you flexible access to your data and to database objects that you use in Financial Analyzer.

- Provides a set of tools that enable you to easily select groups of related data.

## Accessing the Selector

You can access the Selector from a tile that appears in a document window or dialog box. While working in a document, you can also access the Selector from the Tools menu or from the toolbar.

### Accessing the Selector from the toolbar

While working in a document, you can choose **Selector** from the Tools menu or choose the **Select** button from the toolbar.



### Accessing the Selector from a tile in a document window

You can access the Selector from a tile in a document window. In the following illustration, the report window contains a dimension tile labeled Organization.

Choosing **Organization** opens the Selector dialog box, where you can select dimension values for Organization as well as for the other dimensions in the report.



### Accessing the Selector from a tile in a dialog box

You can access the Selector from a dimension tile in a dialog box. In the following illustration, the Copy Data dialog box includes a dimension tile labeled Time.

Choosing **Time** opens the Selector dialog box, where you can select dimension values for Time as well as for the other dimensions for which data is to be copied.
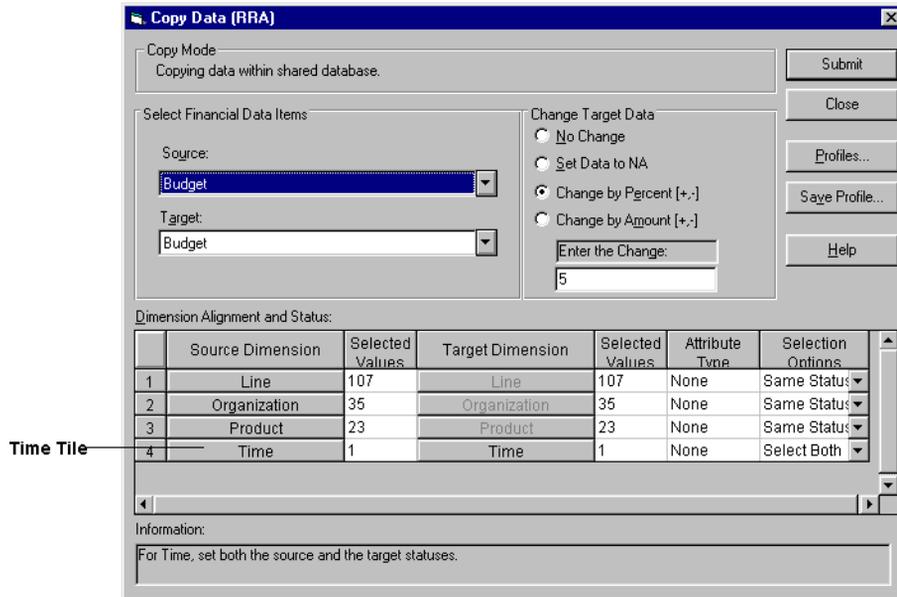


# Selecting Values

## Selectable objects

Depending on your current context when you access the Selector dialog box, you can select:

- Values for one or more dimensions

- Dimension values associated with one or more financial data items

- Dimension values associated with one or more hierarchies

## Moving values to the Selected box

When you work in the Selector dialog box, you place the values that you want to work with into the *Selected* box.

In the following illustration, three values for the Product dimension have been placed in the *Selected* box.
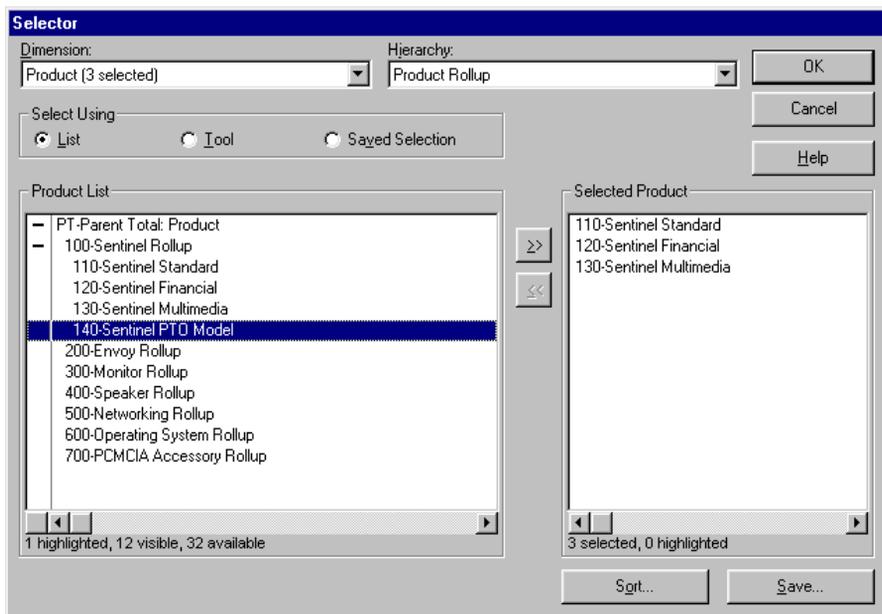


## Methods for selecting values

In the Selector dialog box you can manually select values. You can also access a set of selection tools that enable you to do the following:

- Select all values of a dimension

- Select values that match an attribute that you specify

- Select values based on their hierarchical relationship

- Select values that match characters that you specify

- Select values that meet specific numerical exception criteria that you specify

- Select values that meet specific variable exception criteria that you specify

- Select values within a top and bottom range that you specify

- Select values and then name and save that selection for future use

## Selecting hierarchical values

If the dimension for which you are selecting values is part of one or more hierarchies and you want to display the values as they relate to a hierarchy, you must select the hierarchy from the Hierarchy box before selecting values. Selecting a hierarchy enables you to drill through levels of data in reports and worksheets.

## Maximum amount of selectable values

When selecting values to include in a document, you cannot select more than 5000 values for an across or down edge.

## Sorting selected values

You can sort the values that you have selected. Depending on the dimension for which you are selecting values, the following sort options are available:

- Alphabet — Sorts values in alphabetical order. You can choose **A to Z** or **Z to A**.

- Database — Sorts values according to the order in which they are stored in the database. You can choose **standard** or **reverse**.

- Data Value — Sorts values according to their numeric value. You can choose **high to low** or **low to high**.

- Drag and drop — Enables you to manually arrange values in any order.

- Hierarchy — For a dimension that is organized by a hierarchy, sorts values according to their order in the hierarchy. You can choose **top to bottom** or **bottom to top**.

## Related information

For more information about selecting data, search for the following topics in the Financial Analyzer Help system:

"Selecting All Values of a Dimension"
"Selecting Values by Matching Characters"
"Selecting Top and Bottom Values"
"Selecting Values by Attribute"
"Selecting Values by Specifying Numerical Exception Criteria"
"Selecting Values by Specifying Variable Exception Criteria"
"Selecting Values Manually"
"Sorting Selected Values"
"Sorting Selected Values According to Their Order in the Database"
"Sorting Selected Values Alphabetically"
"Sorting Selected Values Manually"
"Sorting Selected Values Numerically by Data Value"

# 8

# Modeling Data

## Chapter summary

This chapter describes how to create and use models.

## Who should read this chapter

You need to know the information in this chapter if you are:

- An Administrator who creates and maintains models for personal use and for distribution to other users of the shared database that you administer

- A Budget workstation user who creates and maintains models for personal use and uses models that have been distributed to you

- An Analyst workstation user who needs a basic understanding of models and their uses

## List of topics

This chapter includes the following topics:

- About Models

- Creating and Modifying Models

- Model Equation Syntax

- Modeling Functions

- Examples of Models

# About Models

## Definition: Models

Models are sets of up to 8,000 interrelated equations that can be used to calculate new data values. They can also be used in worksheets for performing what-if analyses. Models are:

- Database objects that you create and maintain
- Separate from the financial data items whose data they calculate

To use a model to calculate new data for a financial data item, you include the model in a solve definition, and associate the solve definition with a financial data item. You then run the solve definition to calculate the data. The same model can be used to calculate data for multiple financial data items, as long as they have the same dimensions.

## Using models to manage financial data

Financial Analyzer models can be used to manage a wide range of financial data issues including:

- Simple relationships between dimension values
- Complex reference calls involving data stored in separate data cubes
- Simultaneous equations where the sequence of multiple calculations is essential to deriving the desired results

## Who can work with models?

### Administrators

As an administrator, it is your responsibility to maintain the models that your users access in the shared database that you administer. When you create or modify a model and want other users to be able to access it, you must distribute the model to the shared database and to other users. Typically, administrators create and distribute the basic line item models for their groups.

### Budget workstation users

As a Budget workstation user, you can create and modify models for your own personal use. You can modify models that your administrator has created for you,

but you cannot save the modifications unless you assign a new name to the modified model, retaining the original.

# Creating and Modifying Models

## Creating models

You choose **Model** from the Maintain menu to create a new model. This opens the Maintain Model dialog box where you can define a model. You can create an entirely new model, or you can create a model based on an existing model.

## Process for creating models

Follow these general steps to create a model.

1. Create and name the database object that stores the model definition.

2. Specify the financial data item or items whose data the model will calculate.

3. Define equations and associate them with the values of the financial data item's dimensions. For more information, see "Model Equation Syntax" on page 8-5.

4. If necessary, specify model options that determine the processing order for simultaneous equations. For more information, see "Specifying how simultaneous equations are solved" on page 8-3.

5. Compile and save the model. For more information, see "Compiling and saving models" on page 8-4.

## Specifying how simultaneous equations are solved

A simultaneous equation occurs when an equation in a model indirectly depends on itself as the result of the dependencies among other equations in the model. A dependency occurs when the expression on the right-hand side of the equal sign in one equation refers to the assignment target of another equation.

You control how simultaneous equations are solved by selecting options in the Model Options dialog box. The model options enable you to specify the following:

■ The solution method to use

■ The factors to use in testing for convergence and divergence

- The maximum number of iterations to perform

- The action to take if an equation diverges or fails to converge

## Compiling and saving models

When you have created the model, you must compile and save it. You can then include the compiled model as part of solve and group solve definitions and apply it to worksheet data.

## Modifying models

You choose **Model** from the Maintain menu to modify a model. This opens the Maintain Model dialog box, where you can choose the model that you want to modify. From this starting point you can perform the following functions:

- You can give a model a new name.

- You can delete a model from your personal database. As an administrator, you can also delete a model from the shared database by deleting it from your personal database, and then distributing this change to the shared database.

- You can move a model to a new position in the list of models maintained by the system.

- You can change the equations that are associated with each value of the model's base dimension values. Note that if you modify the equations associated with a model, you may need to modify the option selections that govern how simultaneous equations are solved.

- You can view a list of the dependencies between the model's base dimension values and see how dimension values are grouped.

- You can change model option selections.

## Related information

For more information about working with models, search for the following topics in the Financial Analyzer Help system:

"Creating Models"
"Defining Equations for Dimension Values"
"Deleting Models"

"Moving Models"
"Renaming Models"
"Specifying Model Options"

# Model Equation Syntax

## Overview

Model equations can include operators, numeric constants, and condition statements. You can also include functions, which are described in the topic "Modeling Functions" on page 8-8.

## 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), the subexpressions are evaluated first; then the main expression is evaluated.

Operators are evaluated from left-to-right using the conventional order of precedence: unary operators (negative symbols) are evaluated first, followed by multiplicative operators (*,/), followed by additive operators (+,-).

## Numeric Constants

Numeric constants are real numbers (decimal numbers) or integers (non-decimal numbers).

Real numbers:

- Have a decimal point with digits on both sides

- Can begin with the unary minus symbol (to indicate a negative value)

- Can include exponential notation (d, D, e, or E)

Integers:

- Are whole numbers
- Can include the unary minus symbol to indicate a negative value
- Do not include a decimal point or exponential notation

## Condition statements

### Overview

You can use models to derive data based on certain conditions. You must use the condition statements IF, THEN, and ELSE. All three statements are required.

### Example: Using condition statements

In this example, the TAX line item is calculated based on SALES - EXPENSE and a TAXRATE, where, if the result is negative, the tax is zero.

```
IF SALES – EXPENSE GT 0 THEN (SALES – EXPENSE) * TAXRATE ELSE 0
```

## Multiple line equations

### Overview

When typing a command or equation into a model, you can continue it onto another line by ending the partial command with a hyphen and then continuing on the next line.

**Note:** Financial Analyzer models are limited to one command per If statement.

### Example: Multiple line equations

Note in the following model, the hyphens (-) at the end of the 3rd, 8th, and 9th lines.

```
if sales – expense gt 0
   then
     conssales * –1 –
     sales(line 'advert') / lastyrsales (line 'advert')
```

```
else
 if gross.profit gt 100
   then
     maint.marg / maint.rev -
     service.marg / service.rev -
     .
     .
     .
   else
NA
```

## Referring to another financial data item

When referring to another financial data item, you must create an alias financial data item. In models, you cannot reference financial data items directly; you must always refer to them using their alias. Although the model will compile if a financial data item is referenced directly, a solve that is based on the model will not run.

### Procedure: Creating an alias

Follow this procedure to create an alias for a financial data item.

1.  From the Maintain menu, choose **Financial Data Item**.

2.  Choose **New**.

3.  In the New Financial Data Item dialog box, specify the same dimensions as the Financial Data Item for which you are creating the alias.

4.  Choose **Save**.

5.  Choose **Edit Formula**.

6.  Enter the name of the Financial Data Item for which you are creating the alias.

7.  Choose **Save**.

### Example: Referring to another financial data item

For example, if you have two financial data items called MAYACTL and APRACTL, and you want to create a formula to see the variance in their data, you must create alias financial data items for them. If the aliases you create are called MMAYACTL and MAPRACTL, the formula in the variance financial data item would be:

```
MMAYACTL - MAPRACTL
```

# Modeling Functions

## Uses for functions

Financial Analyzer has many functions that you can use to make calculations and analyze data. You can use functions to perform the following tasks:

- Calculate totals and moving totals, averages, and moving averages
- Reference values from different time periods or derive data based on other line item values
- Compute logs, square roots, absolute values, and random numbers
- Calculate statistical and financial functions

To use a function, you type its name and, in parentheses, some additional information. Each piece of information needed by a function is called an argument.

## Types of functions

Financial Analyzer includes the following types of numeric functions.

| Type of Function | Description |
|---|---|
| Advanced Mathematical | Functions that perform advanced mathematical calculations |
| Time-Series | Functions that retrieve values from a previous or future time period and perform calculations on those values |
| Financial | Functions that perform calculations for financial analysis |
| Aggregation | Functions that return an aggregate value, generally consisting of a single value for many values of the input expression |

## Advanced mathematical functions

Advanced mathematical functions operate on each dimension in the expression. The dimensions of the result are the union of the dimensions of the inputs. The following table describes these functions.

| Function | Description |
|---|---|
| ABS | Calculates an absolute value |
| INTPART | Calculates the integer part of a value |
| LOG | Calculates the natural logarithm |

| Function | Description |
|----------|-------------|
| LOG10 | Calculates the logarithm base 10 |
| MAX | Calculates the maximum between 2 expressions |
| MIN | Calculates the minimum between 2 expressions |
| RANDOM | Calculates a random number |
| REM | Calculates the remainder after a division |
| SQRT | Calculates the square root |

Most advanced mathematical functions operate on a single numeric variable, but the MAX and MIN functions make comparisons between the values of two variables. For dimensioned variables, the MAX and MIN functions compare each value of one variable with the corresponding value of the other variable.

## Time-series functions

The time-series functions retrieve and perform calculations on values from a previous or future time period. The following table describes these functions.

| Function | Description |
|----------|-------------|
| CUMSUM | Calculates cumulative sums over time |
| LAG | Calculates the value for a previous time period |
| LAGABSPCT | Calculates the percent difference between current and previous values and indicates the direction of change |
| LAGDIF | Calculates the difference between current and previous values |
| LAGPCT | Calculates the percent difference between current and previous values |
| LEAD | Calculates the value for a subsequent time period |
| MOVINGAVERAGE | Calculates a series of averages over time |
| MOVINGMAX | Returns a series of maximum values over time |
| MOVINGMIN | Returns a series of minimum values over time |
| MOVINGTOTAL | Calculates a series of totals over time |

The data you retrieve with a time-series function is usually dimensioned by a time dimension, such as MONTH, PERIOD, or YEAR. LAG and LEAD actually can retrieve data of any type, but the other time–series functions handle numeric data only.

The LAG, LAGDIF, LAGPCT, LAGABSPCT, and LEAD functions let you compare data for the time dimension values in the current status with data from a previous or future time period. You specify the data expression you want to analyze, the number of time periods the function should go back or forward for the comparison, and the time dimension. LAG and LEAD simply return the past or future value.

The LAGDIF and LAGPCT functions make the most commonly used types of comparisons, that is, the difference and the percent difference, between the current data and the comparison value.

The moving functions (such as MOVINGTOTAL or MOVINGMAX) return a value for each time period in the status of a time dimension. The value is based on the data for a range of time periods that precede, include, or follow the period for which the value is being calculated. The range is always relative to the current period, so the range is always moving forward as you process each time value in the current status.

## Financial functions

The financial functions provide standard calculations needed for financial analysis. The following table describes these functions.

| Function | Description |
|----------|-------------|
| DEPRDECL | Calculates declining–balance depreciation |
| DEPRSL | Calculates straight-line depreciation |
| DEPRSOYD | Calculates sum-of-year's-digits depreciation |
| FINTSCHED | Calculates the interest on a series of fixed-rate installment loans |
| FPMTSCHED | Calculates payments for a series of fixed-rate installment loans |
| IRR | Calculates the internal rate of return for a stream of cash flows |
| NPV | Calculates the net present value of a stream of cash flows |

## Aggregation functions

Functions that return an aggregate value ordinarily return one value for many values of the input expression. The following table describes these functions.

| Function | Description |
| --- | --- |
| ANY | Tests if any values match a criterion (returns Boolean result) |
| AVERAGE | Calculates an average value |
| COUNT | Counts values that match a criterion |
| EVERY | Tests if every value matches a criterion (returns Boolean result) |
| LARGEST | Calculates the largest value |
| NONE | Tests if no value matches a criterion (returns Boolean result) |
| SMALLEST | Calculates the smallest value |
| STDDEV | Calculates the standard deviation using N–1 |
| TALLY | Counts the number of dimension values corresponding to related dimension values |
| TCONVERT | Aggregates or allocates data based on time periods |
| TOTAL | Calculates a total value |

## Related information

For complete descriptions of modeling functions, refer to the *Oracle Express Language Reference Manual* or the Oracle Express Language online help.

# Examples of Models

## Example 1: Generating basic revenue and expense values

Revenue and expense line items which are commonly derived include:

- Gross Sales
- Cost of Goods Sold
- Gross Profit

Line items not stored in the general ledger or reflected in the standard income statement are often used as the basis for some of these calculations and may be calculations themselves. The following table shows examples of these calculations.

| IF the line item is... | THEN it is derived using the equation... |
|---|---|
| Cost of Goods Sold | Unit Volume * Unit Cost |
| Gross Sales | Unit Volume * Unit Price |
| Net Sales Revenue | Gross Sales - (Sales Discount + Sales Return) |
| Gross Profit | Net Sales Revenue - Total Cost of Goods Sold |
| Unit Volume | LAG (Unit Volume, 12, TIME) * 1.05 * (1 + LAGPCT (Advertising Expense, 12, TIME) / 100) |
| Average Sales Price | Gross Sales / Unit Volume |
| Gross Profit Percentage | Gross Profit / Total Revenue * 100 |

In this example, Unit Volume, Unit Price, Unit Cost, Sales Discounts and Sales Returns are input values. The Unit Volume equation is based on the previous year's Unit Volume value.

The combination of these and other equations is referred to as a model. By applying this model to financial data, these equations are calculated and the resulting figures are available for review, publishing, or further analysis.

## Example 2: Modeling employee headcount

One use of models within organizations with many employees is the modeling of number of employees, or headcount. In organizations where compensation expenses account for a large percentage of total operating expenses, effectively budgeting and planning the compensation expense line items through headcount modeling provides significant level of cost controls.

The following table shows some options for modeling consulting employee headcount and related revenue.

| IF the line item is... . . . | THEN it is derived using the equation... . . . |
|---|---|
| Monthly Revenue | $n$ * Billing Rate * Billability Percentage/100 |
| Monthly Margin | Monthly Revenue - (Average Salary / 12) |
| Consulting Revenue | Monthly Revenue at Job Grade A * (Number of EEs at Job Grade A + Monthly Revenue at Job Grade B * Number of EEs at Job Grade B + ... Monthly Revenue at Job Grade J * Number of EEs at Job Grade J) |

In this example, analysts can vary the Billing Rate, Billibility, or number (n) of employees (EEs) at each Job Grade (V.P., Director, Senior Consultant, etc.). They can then apply the model and see the impact of that change on overall corporate Consulting Revenue.

## Example 3: Top down expense allocation based on prior year data

This sample model calculates the proportion of Advertising Expenses to Marketing Expenses from last year as a means of allocating the targeted, annual budget amount that was entered into Marketing Expense on the worksheet. This is an example of top/down budgeting with models that spread higher level values to the detail based on historical ratios. This same approach will work for Time, Org and all other dimensions. In this example, Marketing Expenses (MKTEXP) consists of Advertising and Selling Expenses.

The following table describes the steps taken to create the model.

1. Create a financial data item formula called Budref. Budref will serve as an alias for the Budget financial data item.

2. Equate the formula for Budref to the Budget as follows:

   ```
   Budref = Budget
   ```

3. Create a worksheet that allows you to enter into Budget the high level numbers you want to spread (for example, Marketing Expenses, Sales, Operating Expenses).

4. Enter the numbers you want to budget into that worksheet.

5. Create a model called Allocate Lines Based On Last Year.

**6.** Write the model equation for the Advertising line item as follows:

```
lastyear(line 'Advert')/lastyear(line 'MKTEXP') *
budref(line 'MKTEXP')
```

Write the model equation for the Selling Expense line item as follows:

```
lastyear(line 'Sellexp')/lastyear(line 'MKTEXP') *
budref(line 'MKTEXP')
```

**Note:** The item "lastyear" represents a financial data item that contains last year's data.

## Example 4: Using the LEAD function

The LEAD function retrieves values from a subsequent time period. A model equation can refer to data from a subsequent time period by incorporating the LEAD command in the equations. For example, if December's budgeted Plant & Equipment asset balance has been determined, to derive September's budgeted amount based on that year end balance, you could use the following equation.

```
LEAD(P&E, 3, TIME) * .90
```

Where:

- P&E is the financial data item (Plant & Equipment) dimensioned by TIME

- 3 is the number of time periods to look ahead (based on 0 being the current period)

- TIME is the dimension along which to lead occurs

## Example 5: Using the LAG function

The LAG function retrieves data from a previous time period. A model equation can refer to data from a previous time period by incorporating the LAG command in the equation. In the equation shown below, a month's revenue (REVENUE) is derived based on the prior month's estimate.

```
LAG(REVENUE, 1, TIME) * 1.05
```

Where:

- REVENUE is the financial data item dimensioned by time

- 1 is the number of periods to lag (based on 0 being the current period)

- TIME is the dimension along which the lag occurs

## Example 6: Using the LAGDIF function

The LAGDIF function calculates the difference between current and previous values. When the difference between two values is useful in deriving a value, this function can be incorporated into the model equation. For instance, in statement of cash flow balances, net change in accounts receivable can be quickly calculated using the LAGDIF function. In the example below, the end of year balances are compared (lag one year time period).

```
LAGDIF(ACCTS.REC, 1, TIME)
```

Where:

- ACCTS.REC is the financial data item dimensioned by TIME
- 1 is the number of time periods to lag (based on 0 being the current period)
- TIME is the dimension along which the lag occurs

## Example 7: Using the LAGPCT function

The LAGPCT function calculates the percent difference between current and previous values. The percent difference calculation is often referenced in deriving budget, forecast and plan data as well as when creating key indicators for tracking performance growth. In the example below, Computer Expense (CMPTR) is tied to Employee Headcount totals (HEADCOUNT). Here, monthly Computer Expense is budgeted based on last month's Computer Expense, multiplied by the increase/decrease in Headcount from the previous month.

```
LAG(CMPTR, 1, TIME) * (LAGPCT(HEADCOUNT, 1, TIME) + 1)
```

Where:

- HEADCOUNT is the financial data item dimensioned by TIME
- 1 is the number of time periods to lag (based on 0 being the current period)
- TIME is the dimension along which the lag occurs

## Example 8: Using the MOVINGAVERAGE function

The MOVINGAVERAGE (abbreviated MVAVG) function computes a series of averages over time or over another dimension. This function can be used to maintain a three-month moving average balance on inventory, as shown in the following equation.

```
MVAVG(INVENTORY, -2, 0, 1, TIME)
```

Where:

- INVENTORY is the financial data item whose values you want to average.

- -2 represents the starting point of the range over which you want to average. Because 0 represents the current period, -2 represents 2 months prior to the current month.

- 0 represents the ending point of the range over which you want to average (with 0 being the current period).

- 1 specifies whether to average over every period in the range. In this case, 1 means average every period; a 2 would mean average every other period, TIME is the dimension over which the moving average is calculated.

## Example 9: Using the MOVINGTOTAL function

The MOVINGTOTAL function (abbreviated MVTOT) computes a series of totals, usually over time, but can also be used over another dimension. Asset management may require monitoring Property Plant and Equipment (PP&E) in six-month moving totals as shown in the following equation.

```
MVTOT(PP&E, -5, 0, 1, TIME)
```

Where:

- PP&E is the financial data item whose values you want to total.

- -5 represents the starting point of the range over which you want to average. Because 0 represents the current period, -5 represents 5 months prior to the current month.

- 0 represents the ending point of the range over which you want to average (with 0 being the current period).

- 1 specifies whether to average over every period in the range. In this case, 1 means average every period; a 2 would mean average every other period, TIME is the dimension over which the moving total is calculated.

# 9

# Solving Data

## Chapter summary

This chapter provides information about solve definitions and group solve definitions.

## Who should read this chapter

You need to know the information in this chapter if you are one of the following:

- An administrator who creates and maintains solve definitions for personal use and for distribution to other users of the shared database that you administer

- A Budget workstation user who creates and maintains solve definitions for personal use and uses solve definitions that have been distributed to you by your administrator

- An Analyst workstation user who, although unable to create, modify, or run solve definitions, wishes to gain a basic understanding of solve definitions and their uses

## List of topics

This chapter includes the following topics:

- About Solving Data

- Working with Solve Definitions

- Working with Group Solve Definitions

- Automatically Running Solves and Group Solves

# About Solving Data

## Definition: Solving data

When changes are made to Financial Analyzer data, the data must be solved to ensure that it is current. Solving data can accomplish the following:

- Calculate new data values for financial data items

- Aggregate values along any hierarchies that have been defined for the dimensions that make up the financial data item

## Definition: Solve definition

A *solve definition* is an information set for calculating new data for a financial data item. The elements that can make up a solve definition are models, hierarchies, and financial data items.

You can use a solve definition to:

- Associate stored financial data items with sets of interrelated equations called models, for the purpose of calculating data

- Associate stored financial data items with dimensional hierarchies for the purpose of aggregating data

- Use both models and hierarchies in combination with the same financial data item so that you can calculate new data for that item and aggregate it along a hierarchy or hierarchies

## Definition: Group solve definition

A *group solve definition* is a mechanism for solving large quantities of data in multiple financial data items by running a single process. A group solve definition can combine solve definitions and copy data profiles, and run them in a specific order to calculate and aggregate data for any number of financial data items.

You can use group solve definitions to perform complex sets of calculations that need to be completed on a periodic basis. For example, you can set up group solve definitions to solve all of the financial data items that are affected by a particular occurrence in your business cycle.

## Reasons to solve data

You solve the data in a financial data item after you have performed any of the following actions:

- Changing or adding an equation in a model for a line item associated with the financial data item

- Changing the aggregation type of a line item dimension associated with the financial data item

- Changing or adding a hierarchy for a dimension associated with the financial data item

- Adding new time periods to your database

- Adding new dimensions to your database

- Adding new financial data items to your database

- Changing the current time period for your database

- Refreshing the financial data item after adding new data

- Entering or changing data for the financial data item through a worksheet, a data entry form, or a copy data event

## Solve definitions run on stored financial data items

Because solve definitions and group solve definitions perform calculations or aggregations on actual stored data values, you can run them only on stored financial data items. You cannot run solve definitions or group solve definitions on formula financial data items because formula financial data items contain no actual data values.

## Solving versus recalculating data

Chapter 15 describes how you can recalculate data in worksheets. Solving data differs from recalculating data in that solves are performed on models, which are defined using specific financial data items. When you run a solve, it is performed for *all* financial data items in the model.

When you recalculate data, the recalculation is performed only on the dimensions currently in status in the worksheet.

## Who can create solve definitions?

### Administrators

As an administrator, it is your responsibility to maintain the solve definitions that your users access in the shared database that you administer. When you create or modify a solve definition and want other users to be able to access it, you must distribute the solve definition to the shared database and to other users.

### Budget workstation users

As a Budget workstation user, you can create and modify solve definitions and group solve definitions for personal use. You can modify definitions that your administrator has created for you, but you cannot save the modifications unless you assign a new name to the modified solve definition, retaining the original.

# Working with Solve Definitions

## Creating a solve definition

You choose **Solve Definition** from the Tools menu to create a new solve definition. This opens the Solve Definition dialog box where you name the solve definition. From this starting point you can do the following:

- Select the financial data item for the solve definition.

- If you want to use a model to calculate new values for the financial data item, select the model.

- If you want to use a hierarchy to roll data up, select the hierarchy dimension values that you want to include in the rollup.

- Save the solve definition.

## Example: Solve definition

The following example shows the Solve Definition dialog box with a solve definition for the Actuals financial data item. The solve definition uses the Profit

and Loss model and will aggregate dimensional hierarchies for Organization, Product, and Time.
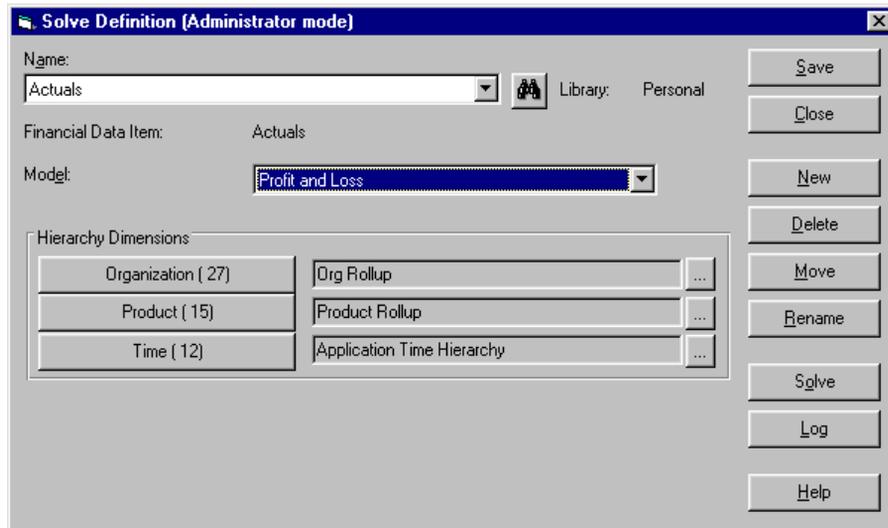


## Note: Dealing with zero values in financial data items

When creating formulas for solve definitions, remember that zero values entered into financial data items are stored in the database as NA values. Zero values entered into financial data items through a data reader are stored as zeros. This can affect the results of calculations that use zero values.

## Running solve definitions

Both administrators and Budget workstation users can manually run solve definitions from the Solve Definition dialog box.

An administrator can also link a solve definition to a financial data item so that the solve definition runs automatically whenever a user submits data associated with a financial data item to the shared database. This feature is described in "Associating solve definitions with financial data items" on page 9-9.

## Setting the operational mode for running solve definitions

If you are using an Administrator workstation, where a solve is performed depends on the Operational Mode setting in the Options dialog box. If the Operational Mode is set to **Administrator**, data models are solved within your personal database. If the Operational Mode is set to **Workstation**, data models are submitted to the Task Processor and solved in the local shared database.

## Modifying solve definitions

You choose **Solve** from the Tools menu to modify solve definitions. This opens the Solve Definition dialog box, where you can choose the solve definition that you want to modify. You can perform the following tasks:

- You can give a solve definition a new name.

- You can delete a saved solve definition from your personal database. As an administrator, you can also delete a solve definition from the shared database by deleting it from your personal database, and then distributing this change to the shared database.

- You can change the information for a solve definition. For example, you can change the model.

- You can move a solve definition to a new position in the list of solve definitions maintained by the system.

## Related information

For more information about using solve definitions, search for the following topics in the Financial Analyzer Help system:

"Creating Solve Definitions"
"Deleting Solve Definitions"
"Moving Solve Definitions"
"Renaming Solve Definitions"
"Running Solve Definitions to Calculate New Data"
"Specifying the Operational Mode"

# Working with Group Solve Definitions

## Creating a group solve definition

You choose **Group Solve Definition** from the Tools menu to create a new group solve definition. This opens the Group Solve dialog box. From this starting point, you can name the new group solve definition and use the tabs in the Add to Group Solve box to select solve definitions and copy data profiles to include in the group solve definition.

## Example: Group solve definition

The following example shows the Group Solve Definition Dialog box. In this example, the group solve definition includes two solve definitions and a copy data profile.
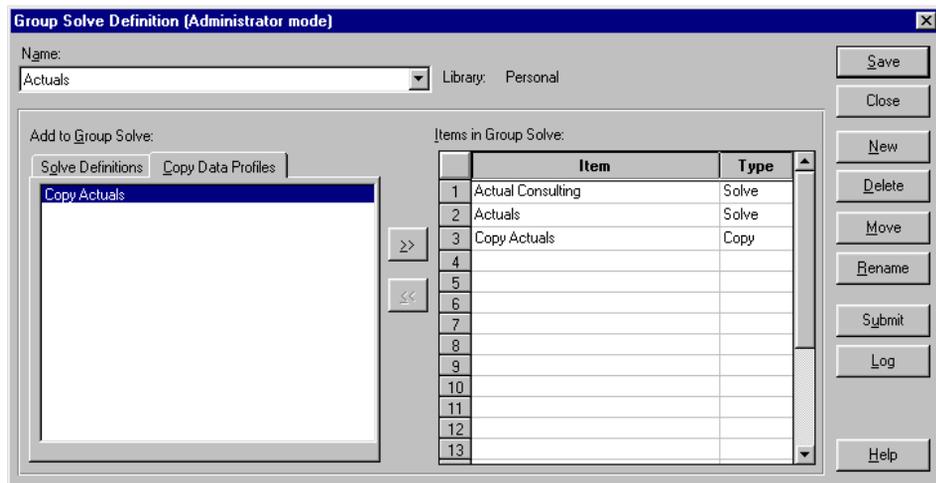


## Running group solve definitions

Both administrators and Budget workstation users can manually run group solve definitions from the Group Solve Definition dialog box.

An administrator can also link a group solve definition to a financial data item so that the group solve definition runs automatically whenever a user submits data

associated with the financial data item to the shared database. This feature is described in "Associating solve definitions with financial data items" on page 9-9.

## Setting the operational mode for running group solve definitions

If you are using an Administrator workstation, where a group solve is performed depends on the Operational Mode setting in the Options dialog box. If the Operational Mode is set to **Administrator**, data models are solved in your personal database. If the Operational Mode is set to **Workstation**, data models are submitted to the Task Processor and solved in the local shared database.

## Modifying group solve definitions

You choose **Group Solve** from the Tools menu to maintain group solve definitions. This opens the Group Solve dialog box, where you can choose the group solve definition that you want to modify. You can perform the following tasks:

- You can give a group solve definition a new name.

- You can delete a group solve definition. As an administrator, you can also delete the group solve definition from the shared database by deleting it from your personal database and then distributing this change.

- You can edit the information for a group solve definition. For example, you can add a solve definition.

- You can move a group solve definition to a new position in the list of group solve definitions maintained by the system.

## Related information

For more information about group solve definitions, search for the following topics in the Financial Analyzer Help system:

"Creating Group Solve Definitions"
"Renaming Group Solve Definitions"
"Moving Group Solve Definitions"
"Deleting Group Solve Definitions"
"Running Group Solve Definitions to Calculate New Data"
"Specifying the Operational Mode"

# Automatically Running Solves and Group Solves

## Associating solve definitions with financial data items

As an administrator, you can define a financial data item so that a solve or group solve runs whenever a user submits data associated with the financial data item to the shared database.

You choose **Financial Data Item** from the Maintain menu to set up the relationship between a financial data item and a solve or group solve. This opens the Maintain Financial Data Item dialog box, where you can select a financial data item and associate it with a solve definition or group solve definition. After you distribute the financial data item to the shared database, the specified solve or group will run automatically.

## Example: Associating a solve definition with a financial data item

The following example shows the Financial Data Item dialog box for Actuals. In this example, the Profile to Solve box shows that a group solve definition, Actuals, is associated with the Actuals financial data item.

## What happens when data is submitted

Each time a Budget workstation user submits data (or the case of an Analyst workstation user, saves data) for the financial data item, the software automatically initiates the appropriate solve definition or group solve definition to recalculate the data.

The dimension values in status when the solve or group solve takes place is determined by the intersection of the submit status and the solve definition status.

| IF the solve profile is . . . | THEN . . . |
|---|---|
| a solve definition | the status set before the solve is the intersection of the status of the submit with the status set in the solve definition. |
| a group solve definition | then the status set before each solve definition in the group is:<br><br>■ The intersection of the status of the submit with the status set in the solve definition, if the financial data item in the solve definition is one that was used in the submit.<br><br>■ The status set by the solve definition if the financial data item in the solve definition was not used in the submit. |

# 10

# Transferring Structures and Data

## Chapter summary

This chapter describes how structures and data are transferred throughout Financial Analyzer.

## Who should read this chapter

Administrators who are responsible for distributing structures, distributing data, submitting data, and refreshing data should read this chapter. Other workstation users can read those sections of the chapter that apply to their role.

## List of topics

This chapter includes the following topics:

- How Information Flows through Financial Analyzer
- About Distribution
- Distributing Structures from Administrator Workstations
- Distributing Data from Administrator Workstations
- Submitting Data from Administrator Workstations
- Submitting Data From Budget Workstations
- Saving Data from Analyst Workstations
- Using the Shareable Documents Feature
- Refreshing Data

# How Information Flows through Financial Analyzer

## Data flow

Financial Analyzer has a multi-layered, or *tiered*, structure that follows the reporting structure of the organization or group of organizations that it supports. Data flows both upward and downward through this system in a specific controlled manner. Administrators can ensure the integrity of the data at each level and enable the users that they support to have access to the appropriate data.

When you make data available to users, you must also give the users access to the objects in the shared database that structure the data. When you distribute objects, you provide read and write access to the data referenced by those objects.

## Structure flow

Database structures usually flow downward through the levels of the tiered structure. The super administrator, who occupies the top-most level of the structure, creates database objects based on the needs of the organization or organizations that the system supports and makes them available to users in the next level of the structure. Lower level administrators do the same for their organizations.

## Administrator as gatekeeper

Data and structure flow is monitored and controlled by the administrator at each level, who maintains the shared database for the users at the level below. The administrator at each level of the reporting structure acts as a sort of "gatekeeper," allowing the appropriate information to flow upward and downward through the system.

## Illustration: Information flow in a tiered environment

The following figure shows how information flows in an installation that uses a tiered architecture. Financial data, represented by the dotted line, is submitted and distributed and thus flows both up and down through the tiered architecture. Database structures, represented by the solid line, are distributed from

administrators to lower level users. This process allows data that originates at one level of the tiered structure to be passed to other tiers.



◄ - - - - - ► = Financial Data
———————► = Database Structures
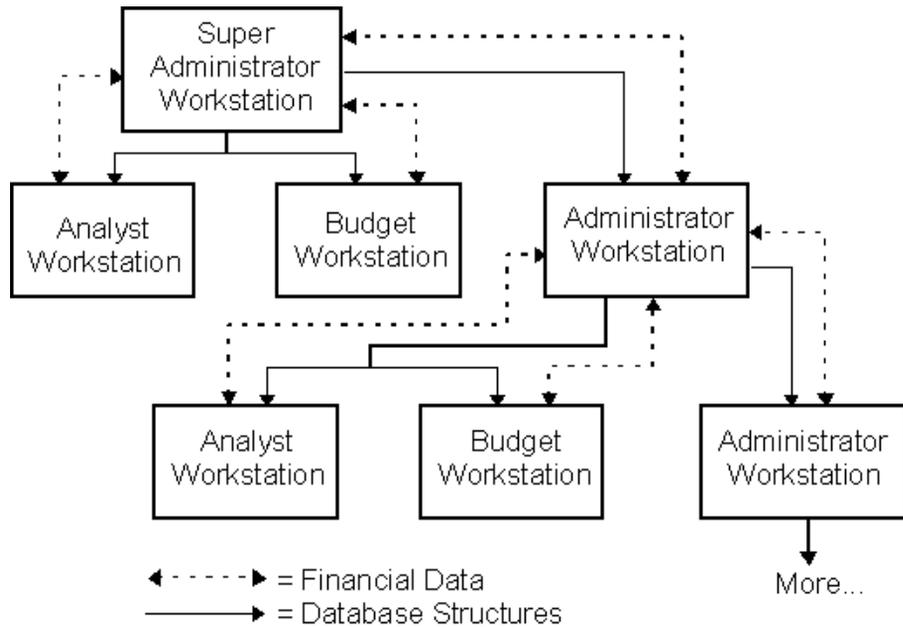
## Methods for transferring information

Financial Analyzer supports the following methods for transferring information.

| Method of Transfer | Description |
|---|---|
| Distribute Structures | Enables administrators (including the system's super administrator) to transfer database objects to their users. |
| Distribute Data | Enables administrators (including the system's super administrator) to transfer data to their users. |
| Refresh Structures | Enables users to incorporate database objects distributed to them by their administrators. |
| Refresh Data | Enables users to update the data that they view or use with the most current version of that data from the shared database. |
| Submit Data | Enables administrators and Budget workstation users to contribute data to the shared database. |

# About Distribution

## Definition: Distribution

In order to give users access to the shared database that you administer, you must provide access to both the data and to the database objects that reference that data. The process that you follow to provide access to objects in your shared database is called *distribution.*

## To whom do you distribute?

You can distribute objects and data as follows:

- To Analyst and Budget workstations in the tier immediately below you in a multiple-tier environment
- To administrator workstations in the tier immediately below you in a multiple-tier environment
- To the shared database

## Importance of distribution

It is important to ensure that users have immediate access to the most current versions of objects. If there is a discrepancy between the version of an object that users are working with and the version that is in your shared database, the users will be unable to contribute data based on that object to the shared database.

**Note:** Everything that you distribute comes from your personal database. Always ensure that an object is current before distributing it to other users.

# Distributing Structures from Administrator Workstations

## When to distribute

The following list outlines some of the conditions under which you would need to distribute structures to the shared database and to the users that you support:

- You have created a new database object for one or more of your users.

- You have modified an existing database object, to which one or more of your users currently has access.

- You need to delete an object from the shared database and remove access to it from one or more users.

- One or more new users needs access to objects in the shared database.

- You need to provide one or more users with access to additional objects, to which they previously did not have access.

## Selecting structures, actions, and users

You choose **Distribution, Data Structure** from the Manage menu to distribute structures. This opens the Data Structure dialog box, where you fill in a selection grid that specifies the structures and their values, the distribution action, and the users who will receive the distribution.

### Selecting distribution items

As you complete the Data Structure dialog box, you select the structure items that you want to distribute. You can choose one or more of the following:

- Dimensions
- Dimension values
- Financial data items
- Hierarchies
- Documents (reports, graphs, worksheets, and data entry forms)
- Models
- Attributes
- Folders

- Solves and group solves

- Profiles for submit, refresh, and copy data

- Custom (Add-In) Menu

- Saved selections

### Selecting distribution actions

As you complete the Data Structure dialog box, you choose a distribution action for each structure. You can choose one of the following:

- Add — Adds the structure to the personal databases of users specified in the Users column.

- Delete from Users — Deletes the structure from the personal databases of users specified in the Users column.

- Delete from System — Deletes the structure from the shared database and from the personal databases of all users in lower levels of the reporting hierarchy. This option effectively removes the structure from use, because lower-level users can no longer submit data for the deleted structure into the shared database.

- Redistribute — Distributes the values of a structure to each selected user according to the values of that structure that are currently resident in each user's personal database.

### Selecting users

As you complete the Data Structure dialog box, you select the users who will receive the distribution.

## Example: Distributing structures

The following example illustrates a completed Distribute Structures dialog box. In this example, the selected structures will be distributed to eight users.
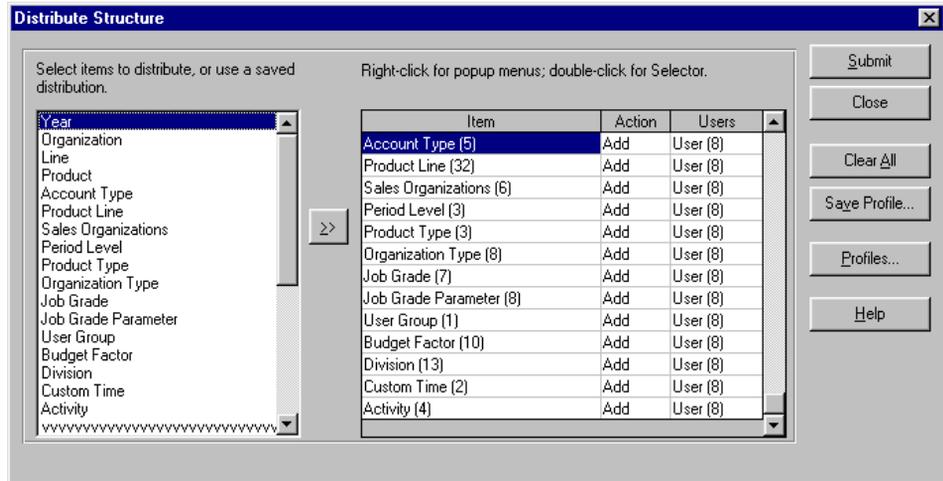


## Limits on document distribution

Do not distribute more than 3000 documents. Also, bear in mind that distributing an extremely large number of documents, such as 1000, might degrade system performance.

## Using distribution profiles

You can save the information that you enter in the Distribute Structure dialog box as a *distribution profile*. A distribution profile captures the information in the selection grid and saves it for reuse. You can apply the profile at a later time — either exactly as is, or as a template for defining similar distributions.

To name and save a distribution profile, complete the grid in the Distribute Structure Dialog box and choose **Save Profile**.

To retrieve a list of saved profiles, choose **Profiles**.

### Note: Distributing structures for new dimension values

If you distribute new dimension values to your users, you must also redistribute the dimensions with which the values are associated. If you do not redistribute the dimensions along with the new dimension values, users may have trouble contributing data associated with those values back to the shared database.

### Note: When structures have the same name

If you distribute a structure to a user who has already created a structure with the same name in their personal database, the new structure will appear in the "DBA Items to Overwrite Personal" column when the user performs a Refresh Preview. When the refresh is performed, the current structure in the user's personal database will be overwritten by the newly distributed structure.

### Submitting structure distributions to the Task Processor

After you specify structures for distribution, you must submit the distribution. Submitting a distribution sends it to the Task Processor.

If your system is not set up to continually run the Task Processor as a separate workstation or in the background, you must manually start the Task Processor so that the task will run.

### Related information

For more information about distributing structures, search for the following topics in the Financial Analyzer Help system:

"Creating a Distribution Profile"
"Distributing Structures"
"Using a Distribution Profile"

## Distributing Data from Administrator Workstations

### When to distribute data

As an administrator, you can distribute slices of data that you entered into your personal database to the shared database that you maintain and to subordinate workstations. This feature enables you to control when your users receive specific types of data, such as currency translation rates, because users receive notification

that they need to refresh their data, and they cannot contribute new data to the shared database until they have refreshed their personal databases.

## Important: Take care when distributing data

It is important to be careful when distributing data, because the data that you distributes overwrites data in the shared database. You can only distribute data for financial data items that you specifically marked for this purpose when you created them by selecting the **Distribute Data** option in the Maintain Financial Data Item dialog box.

## Selecting data for distribution

You choose **Distribution**, **Distribute Data** from the Manage menu to distribute slices of financial data to users and to the shared database. This opens the Distribute Data dialog box, where you can select a financial data item and define an associated data slice.

## Example: Distributing data

The following example illustrates the Distribute Data dialog box. In the example, one data slice is selected for distribution.
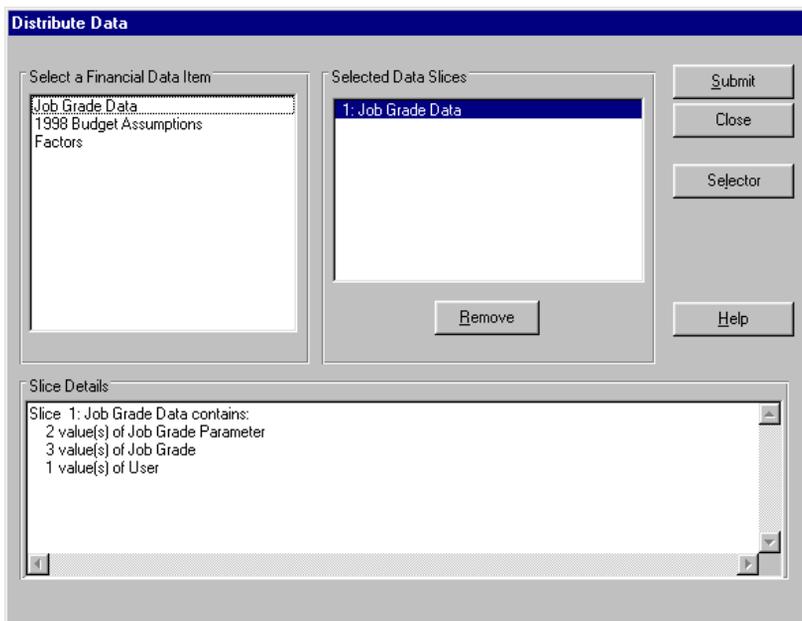


## Submitting distributions to the Task Processor

After you specify data for distribution, you must submit the distribution. Submitting a distribution sends it to the Task Processor.

If your system is not set up to continually run the Task Processor as a separate workstation or in the background, you must manually start the Task Processor so that the task will run.

## Related information

For more information about distributing data, search for the following topics in the Financial Analyzer Help system:

"Creating Financial Data Items"
"Distributing Data"

# Submitting Data from Administrator Workstations

## About submitting data

As an administrator, you are responsible for submitting data that your users submit to your shared database up to your administrator's shared database. This responsibility applies to all administrators below the super administrator level. Because the Super administrator workstation is positioned at the top-most level of the tiered structure, the shared database that the super administrator maintains contains the highest level of consolidated data.

## Operational mode setting for submitting data

The Operational Mode setting in the options dialog box determines how data is submitted from an administrator workstation. If the operational mode is set to **Administrator**, data is submitted from your shared database to the shared database of the administrator at the next highest reporting level. If the operational mode is set to **Workstation**, data is submitted from your personal database to your shared database.

## Selecting data for submission

You choose **Submit Data** from the Manage menu to submit data. This opens the Submit Data dialog box, where you specify the slice or slices of data that you want to submit. A data slice is defined by a stored financial data item (such as Actuals, Budget, or Forecast), which is in turn is defined by a set of dimensions (such as Organization, Line, and Time). You must select values for each dimension of the financial data item.

## Example: Submitting data

This example shows the Submit Data dialog box. In the example, three data slices will be submitted. The Slice Details box displays details for the first slice.
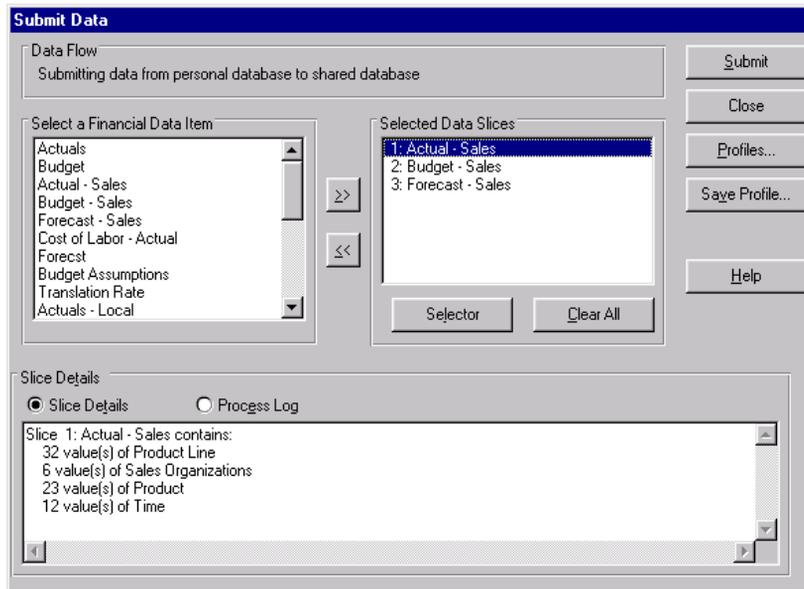


## Using data submission profiles

If you periodically submit the same data, you can save the information in the Submit Data dialog box as a *data submission profile.* A data submission profile captures the selection information and saves it for reuse. You can apply the profile at a later time — either exactly as is, or as a template for defining similar submissions.

To name and save a data submission profile, make your selections in the Submit Data dialog box and choose **Save Profile**. This opens the Submit/Refresh Profiles dialog box, where you can name the profile.

To retrieve a list of saved profiles, choose **Profiles**.

## Distributing data submission profiles

As an administrator, you can distribute data submission profiles to your users. For example, you might want to distribute a profile to streamline the process of budget data collection.

## Role of Task Processor

After you submit data to the shared database, a submission task is sent to the Task Processor. The Task Processor must process the queued task in order for your data to be incorporated into the shared database. Refer to Chapter 11, "Task Processing" for information about setting up and using the Task Processor.

## Related information

For more information about submitting data from administrator workstations, search for the following topics in the Financial Analyzer Help system:

"Creating a Data Submission Profile"
"Operational Mode"
"Submitting Data from Administrator Workstations"
"Using a Data Submission Profile"

# Submitting Data From Budget Workstations

## Role of Budget workstation in submitting data

As a Budget workstation user, you can manipulate the data in your personal database using a worksheet and save your work without affecting the shared database. However, if you want other users to have access to your work, you must submit the data from your personal database to the shared database. For example, after you use a worksheet to prepare a budget or forecast, you can submit your work to the shared database where it can be accessed by other users.

## Selecting data for submission

The process for submitting data from a budget workstation is similar to the process for submitting data from an administrator workstation.

You choose **Submit Data** from the Manage menu to submit data. This opens the Submit Data dialog box, where you specify the slice or slices of data that you want to submit. For details, see "Selecting data for submission" on page 10-11.

### Note: Synchronizing your database

Before you submit data, you must refresh your personal database to synchronize it with the shared database — that is, your personal database must contain the most current set of structures defined for you by your administrator. For information about refreshing your personal database to incorporate new structures, see "Manually refreshing structures" on page 10-18.

### Related information

For more information about submitting data from Budget workstations, search for the following topic in the Financial Analyzer Help system: "Submitting Data From Budget Workstations."

## Saving Data from Analyst Workstations

### Saving data process

If you are using an Analyst workstation, you do not maintain a personal copy of data from the shared database. Rather, you access the shared database directly when you open a worksheet. Therefore, you need only save the data in the worksheet in order to submit your work to the shared database.

### Important: Reverting to saved data

If you attempt to save a worksheet from an Analyst workstation and you receive a message that states that the submission failed, you must exit from Financial Analyzer if you want to revert to the data in the shared database. For example, a submission can fail if you attempt to change the value of a dimension to which you do not have write access.

### Related information

For more information about saving data, search for the following topic in the Financial Analyzer Help system: "Saving Worksheet Data."

# Using the Shareable Documents Feature

## About the shareable documents feature

As an administrator, you can authorize users who are below you in the reporting tier to submit documents to the shared database that you maintain. This extends the task of creating and maintaining documents to subordinate administrators and to Budget and Analyst workstation users.

A shareable document should be based on structures that reside in the shared database. Users who receive a shareable document cannot see any personal structures.

## Process for enabling and using shareable documents

The following steps describe the process for enabling and using shareable documents.

1. You authorize users to create shareable documents.

   In the New User or Edit Users dialog box for the user, choose **Allow to Create Shareable Documents**.

2. You run the Task Processor to update the shared database.

3. When an authorized user submits a new document, the document goes to the shared database.

4. You run the Task Processor to update the shared database. You then manually refresh the document.

5. You distribute the document using one of the following distribution action options:

   - Add — Makes the document available to the users to whom it is distributed. The owner of the document can make modifications and submit them. Other users can use the document, but cannot submit changes.

   - Add with Write Access — Makes the document available to the users to whom it is distributed. All users can use the document and submit changes.

6. You run the Task Processor to process the distribution.

## Example: Authorizing a user to create shareable documents

The following example shows the Edit User dialog box. The Allow to Create Shareable Documents option is enabled, indicating that this user is authorized to create shareable documents.

### Example: Granting write access to shareable document

The following example shows the Distribute Structures dialog box. In the example, Add with Write access is selected as the distribution action.
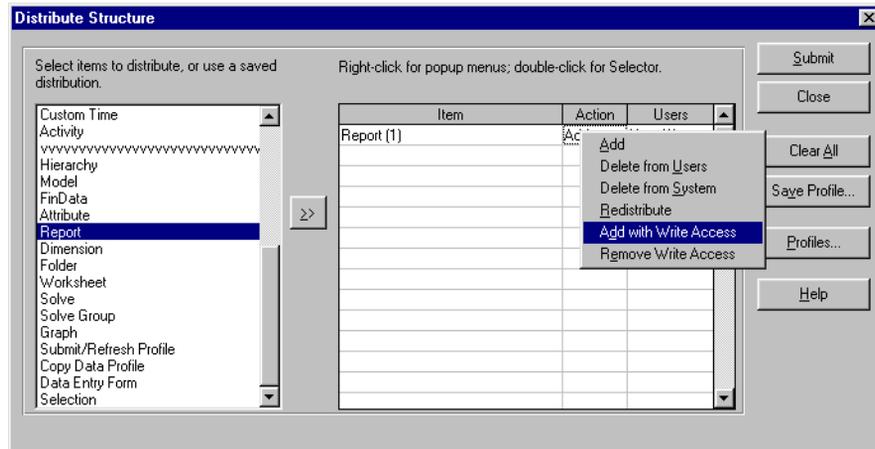


## Refreshing Structures

### Overview

Super administrators and administrators define structures that are appropriate for their users and distribute those structures to the shared database and to their users. Users must then refresh structures in their personal databases so that their view of the data is consistent with their related shared database.

### When automatic refresh occurs

Budget workstation users can set the Automatic Refresh option in the Options dialog box so that a refresh process is automatically initiated if new structures are available to be refreshed when they log onto their systems. They can also choose not to set this option, which enables them to refresh structures manually.

Analyst and Administrator workstation users must always refresh newly available structures when they log in. For these users, the Automatic Refresh option is always on.

## Previewing refresh information at logon

You can set the Show Refresh Preview option in the Options dialog box so that the Refresh Preview dialog box appears when you log onto your system and have structures to refresh. You can use this dialog box to view information about the structures that are available for refresh before you apply them to your database.

## What happens during a refresh

Depending on the type of workstation that you are using, one of the following types of refresh processes will take place:

■   Super administrator workstation — The Super administrator creates all new structures that exist at the top level of the tiered reporting structure; therefore all structures that can be refreshed come from one or more external sources. Structures from an external source are loaded directly into the Super administrator's personal database.

■   Administrator workstations — Administrators can receive structures both from external sources and from the administrator at the next highest level in the tiered reporting structure. If structures have been loaded from an external source into the administrator's shared database, the refresh process brings those structures into the administrator's personal database. If structures have been distributed to the administrator, the refresh process brings those structures into the administrator's shared database.

■   Budget workstations — Budget workstations refresh structures from their administrators shared database. The structures are refreshed from the administrator's shared database into the Budget Workstation user's personal database.

## Manually refreshing structures

You choose **Refresh Structure** from the Manage menu to manually refresh data structures. If there are new structures to refresh, the Refresh Preview dialog box appears. You can use this dialog box to view information about the structures that are available for refresh before you apply them to your database. When you choose **Refresh**, the structures are refreshed.

## Related information

For more information about refreshing structures, search for the following topic in the Financial Analyzer Help system: "Refreshing Structures."

# Refreshing Data

## Manually refreshing data

As an administrator, you are responsible for refreshing the data in the shared database that you maintain with new or modified data from the shared database in the tier immediately above you in the reporting structure.

If you are an administrator or super administrator and you work with data in your personal database, you can also refresh the data in your personal database from the shared database that you maintain.

## Operational mode for refreshing data

As an administrator, you can refresh data in your personal database or in the shared database that you maintain. You set the Operational Mode in the Options dialog box to indicate how you are refreshing data.

If you set the Operational Mode to **Administrator**, data in your local shared database is refreshed from the shared database of the administrator at the next highest reporting level. If you set the Operational Mode is **Workstation**, data in your personal database is refreshed with data from your shared database.

## Important: Refresh structures before data

If an administrator has distributed new or updated structures, you must refresh the new structures before you can refresh new data associated with those structures.

## Selecting data to refresh

You choose **Refresh Data** from the Manage menu to refresh data. This opens the Refresh Data dialog box, where you can specify which slices of data you want to refresh. A data slice is defined by a stored financial data item (such as Actuals, Budget, or Forecast), which is in turn defined by a set of dimensions (such as Organization, Line, and Time). You must select values for each dimension of the financial data item.

## Example: Selecting data to refresh

The following example shows the Refresh Data dialog box, with three data slices selected for refresh. The Slice details box displays the details for the first slice.
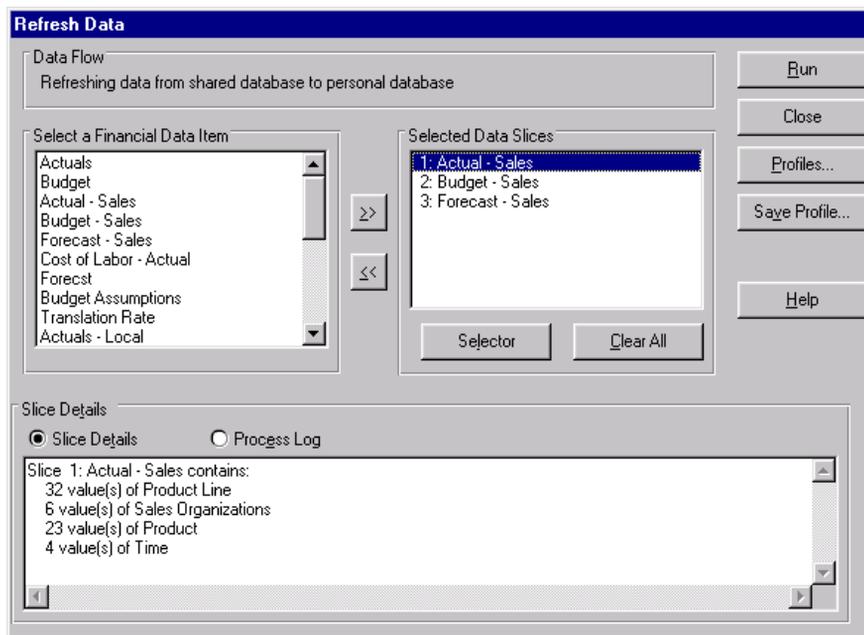


## Using data refresh data profiles

If you periodically refresh the same or similar data, you can save the information in the Refresh Data dialog box as a *data refresh profile*. A data refresh profile captures the selection information and saves it for reuse. You can apply the saved profile at a later time — either exactly as is, or as a template for defining similar data refreshes.

To name and save a data refresh profile, make your selections in the Refresh Data dialog box and choose **Save Profile**.

To retrieve a list of saved profiles, choose **Profiles**.

## Distributing a data refresh profile

As an administrator, you can distribute a saved data refresh profile to your users to streamline the process of refreshing data.

## Related information

For more information about refreshing data, search for the following topics in the Financial Analyzer Help system:

"Creating a Data Refresh Profile"
"Operational Mode"
"Refreshing Data"
"Using a Data Refresh Profile"

# 11

# Task Processing

## Chapter summary

This chapter describes the features of the Task Processor and Task queue, and provides an overview of their use.

## Who should read this chapter

You need to know the information in this chapter if you are:

- An Administrator who is in charge of monitoring and running the Task Processor

- A Budget workstation or Analyst workstation user who wants to know what happens to your data after you submit it.

## List of topics

This chapter includes the following topics:

- About Task Processing

- Using the Task Processor

- Using the Task Queue

# About Task Processing

## Task Processor maintains the shared database

The Task Processor enables an administrator to maintain the shared database. All administrator distributions, solve definition processes, and data submissions to the shared database are routed to the Task Processor, where they wait in a queue until they are processed. This procedure:

- Enables multiple users to submit tasks simultaneously
- Gives the administrator the opportunity to monitor the processing events

## Task processor configurations

The Task Processor can be set up in the following ways:

- A Task Processor workstation can be defined as part of the administrator's workstation, which gives the responsibility of updating to the administrator.
- A Task Processor can be defined as a separate workstation, which allows the administrator to continue working without being responsible for processing data submitted by users.
- A Task Processor can be defined directly on a server.

## When to run the task processor

The frequency at which data is distributed by administrators and shared among users will depend on:

- The size of the company
- The number of users within the administrator's database network

To increase the efficiency of distributing and sharing data, Financial Analyzer processes all tasks using the Task Processor and tracks them using the Task queue.

# Using the Task Processor

## Running the Task Processor

You choose **Task Processor** from the Manage menu to run the Task Processor. You select the mode (background or foreground) and start the processing.

**Note:** You can only run the Task Processor in background mode if the Task Processor has been configured to run on the server where Express Server is located).

## How tasks are processed

All tasks in the Task Processor are processed chronologically, which means that like tasks can overwrite each other, depending on the order in which each task is submitted for processing. As the administrator, you can reschedule tasks so that the more critical information is not inadvertently overwritten.

## Related information

For more information about using the Task Processor, search for the following topics in the Financial Analyzer Help system:

"Running the Task Processor in Background Mode"
"Running the Task Processor in Foreground Mode"
"Stopping the Task Processor"

For information about submitting data to the shared database, refer to Chapter 10 of this guide. For information about how to control user access to information in the shared database, refer to Chapter 12 of this guide.

# Using the Task Queue

## Function of Task queue

When tasks are submitted and processed by the Task Processor, they appear in the Task queue.

## Information you can obtain from the Task queue

For each task, the Task queue displays the following information:

- The user who initiated the task
- The task type (such as "Distribution")
- Whether the task is pending or has been processed
- When the task was submitted for processing
- If pending, when the task is scheduled to be processed
- If pending, the task's position (priority) in the queue
- If processed, the elapsed time.
- If processed, when processing was completed

## Viewing tasks in the Task queue

If you are an administrator, you can view information about tasks in the Task queue that you manage. You can view the history of any task and you can view the details of Submit Data tasks.

## Rescheduling tasks in the Task queue

As part of managing the task queue, you can change the scheduled start time of pending tasks. This is useful if, for example, you want to schedule a particularly large task to be processed after normal working hours. Note that you cannot reschedule Distribute Structure tasks.

## Deleting tasks from the Task queue

Administrators can delete tasks from the Task queue.

## Related information

For more information about the Task queue, search for the following topics in the Financial Analyzer Help system:

"Deleting Tasks from the Task Queue"
"Viewing Task in the Task Queue"
"Rescheduling Tasks in the Task Queue"

# 12

# Managing User Access

## Chapter summary

This chapter describes the functions that administrators perform to manage user access.

## Who should read this chapter

Read this chapter if you are an administrator who maintains users and controls access to data in the shared database.

## List of topics

This chapter includes the following topics:

- Creating Users
- Maintaining Users
- Controlling Access to Shared Data
- Creating Write Access Profiles

# Creating Users

## Who can create users?

As an administrator, you can create users for the shared database that you maintain.

## Prerequisites for creating users

### Windows client users require installed environment

Before you can create a new Windows client user, you must install the user's environment. This environment, called a *component*, contains shell databases and configuration files.

For information about installing user environments, see *Oracle Financial Analyzer Installation and Upgrade Guide*.

### Determine web sign-on method

Ask your system administrator how web users will access Financial Analyzer. If the system has been installed so that users will access Financial Analyzer through Oracle Self Service Applications, setting up users will involve importing user names from Oracle Applications. You will need an Oracle Applications user ID, password, and connection alias to perform this task.

## Adding users

Choose **Users** from the Manage menu to create a new user. This opens the Manage Users dialog box, where you choose **New** to enter information for a new user.

You provide the following user information:

- User — Enter a name that identifies the user.

- User type — Select the type of user. For more information, see "Specifying user type" on page 12-3.

- Usernames — Choose **Edit** to access the Edit User dialog box where you can associate one or more user names with the user and specify whether the user is authorized to create shareable documents. For more information, see "Specifying user name" on page 12-3 and "Using the Shareable Documents Feature" on page 10-15.

■ Other — Provide information that is specific to the client type. For example, for a thin-client workstation, you enter the SHELLS directory of the component where you are creating the user and the Express Server instance to which the user's personal database will be connected.

Adding a new user creates a user task and sends it to the Task Processor. If you are not running the Task Processor in the background, you must run it in the foreground to process the user task.

## Specifying user type

You can create the following type of users:

■ DBA — An administrator who has access to a personal and shared database and to the set of features that are available in the Administrator workstation. On the web, DBA users access data from the shared database

■ Budget — A user who has access to a personal database and to the set of features that are available in the Budget workstation. For a budget user who will access Financial Analyzer through the Windows client, you can create a budget user as thin- or thick client. On the web, budget users access data from the shared database.

■ Analyst — A user who has access to a temporary personal database and to the set of features that are available in the Analyst workstation. For a Windows client, an analyst user's personal database must be connected to the same instance of Express Server that is connected to the shared database.

■ External — A user who has access to the shared database of his or her administrator and to a set of features that are available through the Financial Analyzer Web interface, through the Express Spreadsheet Add-In, or through a custom application that accesses the Financial Analyzer shared database.

## Specifying user name

You can import user names from one of two sources:

■ Operating system — Choose this option to select users who will access Financial Analyzer through the Windows client. You can also use this option to select web users who will *not* use Oracle Applications to access Financial Analyzer.

■ Oracle Applications — Choose this option to select web users who will use Oracle Applications to access Financial Analyzer through a single sign-on.

For Windows client users and web users who will not use Oracle Applications to access Financial Analyzer, you also have the option to manually type in a user name.

### Manually entering user names

To enter a user name, type the name into the blank Specify User Name box in the New User dialog box or the Edit User dialog box.

### Importing user names from the operating system

To import user names from the operating system, choose **Import User** in the New User dialog box or the Edit User dialog box. Choose the **System Users** tab, select one or more users and choose **OK**.

### Importing user names from Oracle Applications

To import user names from Oracle Applications, choose **Import User** in the New User dialog box or the Edit User dialog box. Choose the **Oracle Applications** tab, log into Oracle Applications, select one or more users, and choose **OK**.

You only have to log into Oracle Applications once per session. When you log in, you are prompted for the following information:

- Oracle Applications user ID — Your ID for the Financial Analyzer schema
- Oracle Applications password — Your password for the Financial Analyzer schema
- Alias — Alias for the TSNAMES.ORA connection file

**Note:** Your system administrator can provide this information.

The system retrieves a list of those users who have been authorized for the user type in Oracle Applications. For example, if you are specifying an analyst user, the system will display the names of individuals who have been associated with the responsibility of Financial Analyzer analyst in Oracle Applications.

## Example: Adding a new user

The following illustration shows the New User dialog box with information for an Analyst workstation user (Analyst2). In this example, the user is associated with

two user names. The (OA) designation appended to the second name indicates that the user name has been imported from Oracle Applications.



## Related information

For more information about creating users, search for the following topics in the Financial Analyzer Help system: Creating Users.

"Creating Users"
"Import Users Dialog Box"
"Oracle Applications Log In Dialog Box"

# Maintaining Users

## About maintaining users

You choose **Users** from the Manage menu to maintain users. This opens the Manage Users dialog box, where you can perform the following maintenance functions:

- Give a user a new name.

- Delete a user.

- Choose **Edit** to access the Edit User dialog box, where you can change information that is associated with the user. For example, you can add or remove user names associated with the user, specify whether the user is authorized to create shareable documents, and change database information.

- Move a user to a new position in the list of users maintained by the system.

## If you remove a user

When you delete a user or remove a user name, that user's database and icon are *not* automatically deleted. However, if a user that you have deleted attempts to log in, that user will receive an error message stating that they are not a valid Financial Analyzer user and the login process will be discontinued.

Deleting or removing a user, creates a user task and sends it to the Task Processor. If you are not running the Task Processor in the background, you must run it in the foreground to process the user task.

## Example: Maintaining users

The following illustrations shows the Manage Users dialog box.
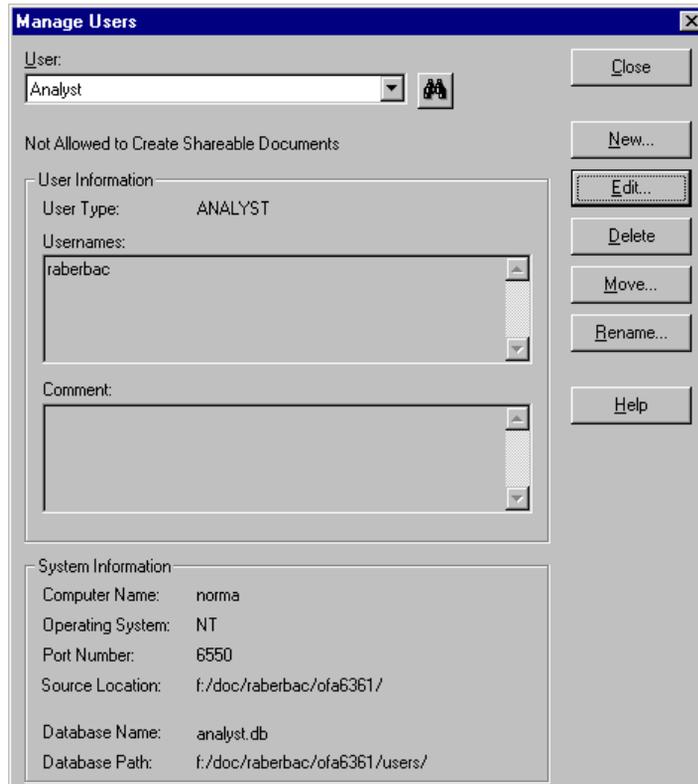


## Related information

For more information about maintaining users, search for the following topics in the
Financial Analyzer Help system:

"Deleting Users"
"Moving Users"
"Renaming Users"

# Controlling Access to Shared Data

## About data access restrictions

As an administrator, you are responsible for controlling read and write access to the shared database on your level in the tiered structure. By default, users have both read and write access to data in the shared database. When appropriate, you can prevent one or more users from writing to a particular slice of data to which they would otherwise have access.

## Role of write access profile

A write access profile enables you to select a slice of data and prevent specific users or all users who have access to that data from contributing data to the shared database for values of the slice.

When you restrict users' write access to data, you prevent them from writing new data values to the dimensions in the shared database; you do not restrict the users' ability to view that data or to work with it in reports, graphs, worksheets, or data entry forms.

## Examples: Restricting data access

Following are some of the ways in which you might want to restrict access to data for a financial data item.

### Preventing all users from accessing values of one dimension

You can deny access to one or more values of a single dimension. For example, if you want to prevent all users from changing Actuals data in the shared database for the month of June, you can deny write access to the June value of the Time dimension for the financial data item. This action denies all users write access to the June Time dimension value and to any Actuals data dimensioned by June.

### Preventing all users from accessing a combination of values of two or more dimensions

You can deny write access to one or more values of two or more dimensions. For example, if you want to prevent all users from changing Actuals data for the organizations London, Chicago, and New York for the month of November, you can deny write access to the London, Chicago, and New York values of the Organization dimension and to the November value of the Time dimension. This

action denies all users write access to those dimension values and to any Actuals data dimensioned by those values.

### Preventing specific users from accessing dimensions

You can deny write access to one or more users. For example, you might deny write access to Actuals to users who are entering data into data entry forms over the web. This will prevent the users from overwriting data cells for Actuals.

# Creating Write Access Profiles

## Process for creating a write access profile

Choose **Write Access Profiles** from the Manage menu to create a new write access profile. This opens the Write Access Profiles dialog box. From this starting point, you follow these general steps to create a write access profile.

1. You select the financial data item that contains the data to which you want to control write access.

2. You select the set of dimensions that make up the slice of data to which you want to deny write access.

   **Note:** To deny write access to specific users, select the User dimension as part of the slice. To deny write access to all users, do not select the User dimension. If you do not select the User dimension, the selections that you make to deny write access to data values in the slice will apply to all users.

3. You select the values for each dimension that make up the slice of data that you want to work with.

4. You deny access to the data slice.

## Example: Selecting the financial data item for the profile

The following example shows the Write Access Profile dialog box. In this example, the user selects Actuals as the financial data item for a new write access profile.
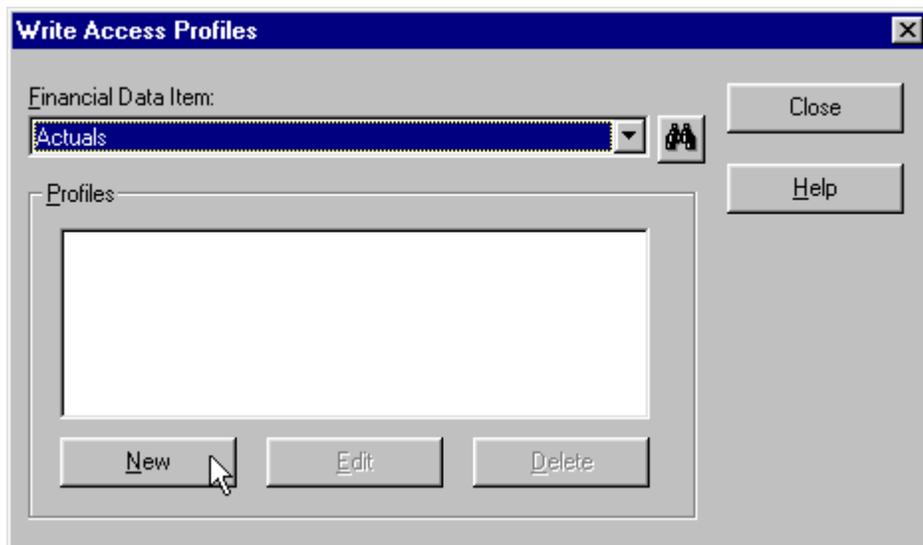
## Example: Selecting dimensions for the profile

The following example shows the New Write Access Profile dialog box. In this example, the user selects Organization and Time as the dimensions to limit.
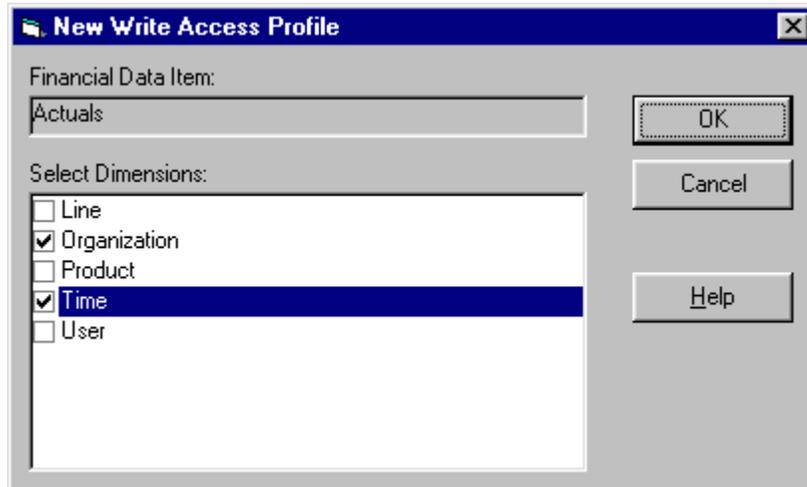
## Example: Defining the data slice for the profile

This example shows the Edit Write Access Profile dialog box. In this example, the user selects dimension values that define a data slice that includes November 2000 as the Time dimension value and Government as the Organization dimension value.
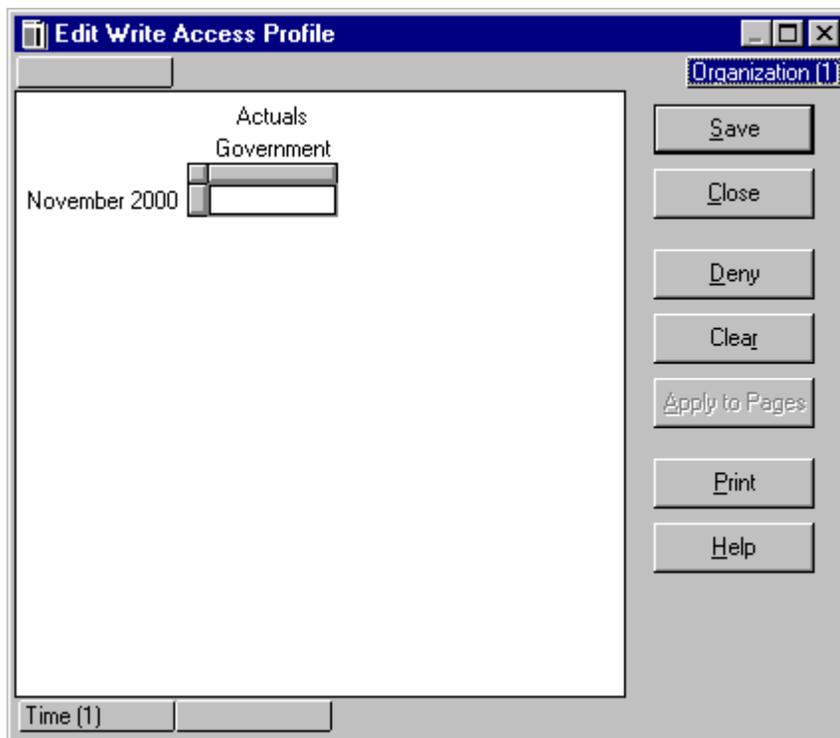
## Example: Denying access to the data slice

This example again shows the Edit Write Access Profile dialog box. In this example, the user denies access to the data slice. Access is denied to all users since specific users have not been selected.
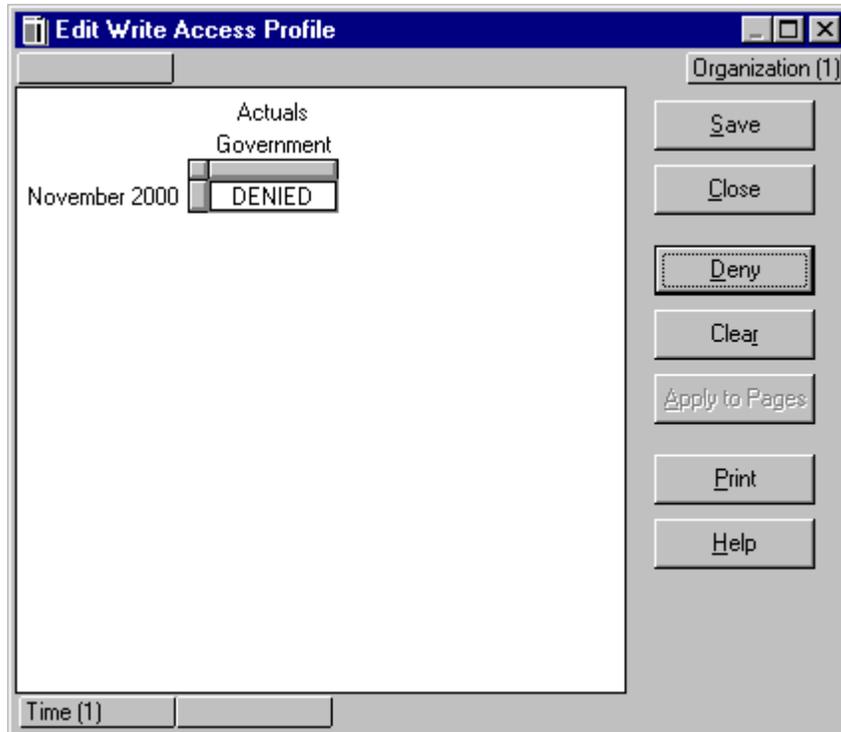


## Related information

For more information about creating write access profiles, search for following topic in the Financial Analyzer Help system: "Creating a Write Access Profile."

# Managing Write Access Profiles

## Deleting write access profiles

When a write access profile is no longer appropriate, you can delete it. Deleting a write access profile deletes both the write access restriction and the associated data slice definition.

## Editing write access profiles

You can modify a write access profile by making new value selections for the data slice. For example, you might update a write access profile that restricts write access to November Actuals, to restrict write access to December Actuals.

You can also modify a write access profile by clearing the Deny function. This removes the write access restriction, but maintains the data slice definition for reuse.

# 13

# Reports

## Chapter summary

This chapter describes reports and how to create, edit and maintain them.

## Who should read this chapter

You need to know the information in this chapter if you are an administrator, Budget workstation, or Analyst workstation user who is responsible for creating, editing, or maintaining reports.

## List of topics

This chapter includes the following topics:

- About Reports
- Creating Reports
- Creating Asymmetric Reports
- Creating Ranking and Exception Reports
- Using Report Calculations
- Formatting Reports
- Saving Reports
- Managing Reports
- Linking Reports
- Drilling through Levels of Data in Reports

# About Reports

## Definition: Reports

A report is an interactive tool that enables you to view financial data from different perspectives and prepare effective presentations based on your analyses.

## Types of reports

Financial Analyzer allows you to design your own reports. In addition, you can create two special types of reports:

- Asymmetric report — Combines the values of two dimensions, or the values of a dimension and a financial data item

- Ranking/Exception report — Identifies values meeting specific exception criteria, ranking criteria, or both exception and ranking criteria

## Report objects

Reports enable you to view and format financial data based on the financial data items, dimensions, and dimension values that are defined in your personal database. Before you can create a report, your personal database must contain the required database objects. Administrators typically define database objects and distribute them to users.

## Report window

The report window contains elements that enable you to manipulate a report's layout and format. The following illustration shows a typical report and its elements.
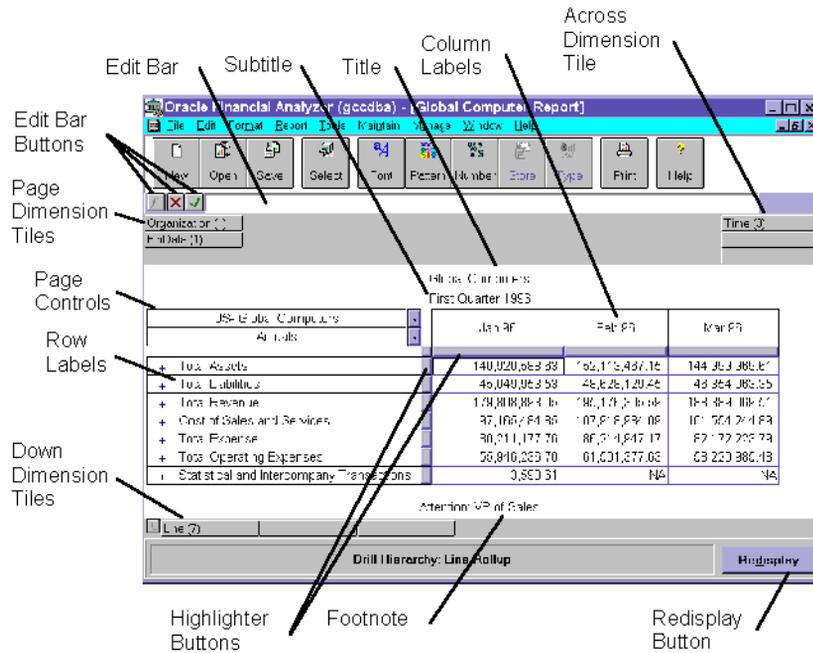
The following table describes the elements of the report window.

| Element | Description |
|---|---|
| Dimension tiles | Enable you to rearrange the layout of a report and access the Selector dialog box, where you can choose a different set of values for the dimension. There are three types of dimension tiles:<br><br>■ Page dimension tiles — Located in the upper-left corner of the report window, these tiles represent dimensions in the page position<br><br>■ Across dimension tiles — Located in the upper-right corner of the report window, these tiles represent dimensions in the across position<br><br>■ Down dimension tiles — Located at the bottom of the report window, these tiles represent dimensions in the down position |
| Edit bar | Enables you to edit text, such as titles, footnotes, and dimension labels. Select the text or data value you want to edit to make it appear in the edit bar. |
| Edit bar buttons | The Formula Tools button opens the Formula Tools dialog box, which you can use to edit formulas.<br><br><br><br>The Cancel button clears text or formulas from the edit bar.<br><br><br><br>The Enter button moves text or formulas from the edit bar to the currently selected area.<br><br> |
| Page controls | Enables you to move between pages in a multiple-page document. |
| Title, subtitle, and footnote panes | Enables you to specify a title, subtitle, and footnote for the report. |
| Row and column labels | Identifies currently selected dimension values. |
| Highlighter buttons | Enables you to select data cells for formatting. You can select a single row or column, a series of rows or columns, or the entire body of a document. |
| Redisplay button | Enables you to refresh a document manually after making format or selection changes. |

## Report menu

When you create a new report or open an existing report, the Report menu becomes available on the menu bar.

The following table describes the items on the Report menu.

| Menu Item | Description |
|---|---|
| **Report Options** | Opens the Report Options dialog box, where you can choose elements to display in the report. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Drill** | When checked, enables drilling in reports. |
| **Auto Redisplay** | When checked, specifies that reports are to be automatically redisplayed when you make changes to them. |
| **Asymmetric Format** | Opens the Create Asymmetric Combination dialog box, where you can join the values of two dimensions and create a custom arrangement of their values. |
| **Ranking/ Exception Report** | Opens the Ranking and Exception Setup dialog box, where you can specify the criteria for a ranking and exception report. |
| **Drill to GL** | Provides detailed information in General Ledger that may not appear on a report. This option is accessible only if you are working with a report based on data that was loaded from General Ledger and you are set up to use the GL Link. |

# Creating Reports

## About creating reports

When you create a report, current financial data from your personal database is automatically included in the report cells. You can base a report on the default report template or on an open report or graph.

## Process for creating a report

Follow these general steps to create a report.

1.  From the File menu, choose **New** and then choose **Report**.

    The menu bar displays the Report menu. The document window displays a default report.

2.  Select the data that you want to include in the report. For more information, see "Selecting data to include in a report" on page 13-6.

3.  Adjust the layout of the report to arrange the dimensions according to how you want to view the data. For more information, see "Changing the layout of a report" on page 13-7.

4.  You can include calculations in the report. For more information, see "Using Report Calculations" on page 13-15.

5.  You can apply asymmetric formatting to the report. For more information, see "Creating Asymmetric Reports" on page 13-7.

6.  You can apply ranking/exception criteria to the report data. For more information, see "Creating Ranking and Exception Reports" on page 13-11.

7.  You can apply formatting to the report. For more information, see "Formatting Reports" on page 13-23.

## Selecting data to include in a report

You use selection tools to specify the slices of data that you want the report to include. In the context of a report, a data slice is defined by a financial data item and a set of dimension values.

For example, if you wanted to create a report that compares Actuals data with Budget data, you would select:

■   Both the Actuals and Budget financial data items

■   A set of dimension values for each item

If the financial data items are dimensioned by Time, Line Item, and Organization, you would select a set of time periods, line items, and organizations for each financial data item.

For more information on the tools and techniques that are available for selecting data, see Chapter 7.

## Changing the layout of a report

Once you have created a report and selected the data that you want to work with, you can arrange the dimensions according to how you want to view the data.

You rearrange dimensions in a report by changing the positions of the dimension tiles in the report window. You can move dimension tiles to unoccupied locations, except when the combination of tiles would result in more than 5,000 dimension values along one edge of the report. You can also drop labeled tiles onto other labeled tiles to have the dimensions rotate positions.

## Related information

For more information about creating reports, search for the following topics in the Financial Analyzer Help system:

"Opening Reports"
"Closing Reports"
"Creating Reports"
"Selecting Data"

# Creating Asymmetric Reports

## Definition: Asymmetric report

An asymmetric report is a report format that combines the values of two dimensions, or the values of a dimension and a financial data item. An asymmetric combination gives you access to all of the values of both dimensions and provides a great deal of flexibility for positioning the values along the rows, columns, or pages of the report.

## Process for creating an asymmetric report

Follow these general steps to create an asymmetric report.

1.  Open or create the report that you want to work with.

2.  Place the objects (dimensions or dimensions and financial data items) that you want to combine on the same edge of the report.

3.  From the Report menu, choose **Asymmetric Format**.

    The Asymmetric Combination dialog box appears.

4.  In the Asymmetric Combination dialog box select two dimensions that you want to combine and choose **OK**.

    The New Tile Name dialog box appears.

5.  In the New Tile Name dialog box, enter a name for the new tile that the system creates for the asymmetric combination and choose **OK**.

    The Asymmetric Layout dialog box appears.

6.  In the Asymmetric Layout dialog box, use the edit bar and the **Insert**, **Delete**, and **Move** buttons to arrange the list of values as you want them to appear in the report. When you are satisfied with the arrangement, choose **OK**.

## Example: Asymmetric report

The report in this example includes data for the Actuals financial data item for three months in 1999 and 2000. The asymmetric combination reformats the values so that the data is easier to compare by month.

## Standard report

In the standard version of the report, the values are displayed chronologically, as shown in the following illustration.

### Asymmetric combination

When an asymmetric combination is applied to the report, the data is displayed as shown in the following illustration. You can now easily compare Actuals for each month of the quarter.



## Using asymmetric reports from which financial data items have been deleted

If you open a previously saved asymmetric report that uses a financial data item that you have deleted since the report was saved, you will receive the following error message:

```
An error occurred setting up data for the report. Consider changing the
definition to access a different selection.
```

You can fix this error and still use the report by following the procedure described in the following Help topic: "Using Asymmetric Reports From Which Financial Data Items Have Been Deleted."

## Removing asymmetric formatting from a report

You can remove the asymmetric formatting from a report at any time.

When you separate the asymmetric combination into its component dimensions, the values in status for those dimensions remain the same as for the asymmetric combination. If you want to change the status, you must access the Selector and select the items you want to include in each dimension. Also note that when you remove the formatting, you may need to reposition the dimension tiles to set up the report as you want it.

## Related information

For more information about asymmetric reports, search for the following topics in the Financial Analyzer Help system:

"Including Asymmetric Formatting in a Report"
"Removing Asymmetric Formatting From a Report"
"Using Asymmetric Reports From Which Financial Data Items Have Been Deleted"

# Creating Ranking and Exception Reports

## Definition: Ranking and Exception reports

Ranking and Exception reports apply ranking criteria, exception criteria, or both ranking and exception criteria to a dimension. The criteria is applied to each page of data.

## Types of Ranking and Exception reports

There are four types of ranking and exception reports:

- Ranking report — Displays data in an order that meets a set of criteria that you specify. For example, you might rank products by volume within a market area and time period.

- Exception report — Displays data associated with dimension values that meet cutoff values within parameters that you specify. For example, you might display expense items for which variance is greater than 10% within a cost center and time period.

- Ranking-then-exception report — Displays data in an order that meets a set of criteria that you specify, then displays a subset of the ranked data that meet

cutoff values within parameters that you specify. For example, you might rank the top 100 products by volume for a year in the U.S. and then display a ranked subset of those products for which sales exceeded $1.5 million in the U.S. for the year.

■ Exception-then-ranking report — Displays data associated with dimension values that meet cutoff values within parameters that you specify in an order that meets criteria that you specify. For example, you might display products for which sales exceeded $1.5 million in the U.S. for the second quarter and rank the top five of these products by volume change from year ago in the U.S. for the second quarter.

## Process for creating a Ranking/Exception report

Follow these general steps to create a Ranking/Exception report.

1. Open an existing report or choose **New** from the Report menu.

2. From the Report menu, choose **Ranking/Exception**.

   **Note:** The Ranking/Exception menu item is not available if the report that you create or open has more than one dimension in the down position, or if the dimension in the down position is the FinData dimension.

3. In the Ranking and Exception dialog box, choose the report type. For information on report types, see "Types of Ranking and Exception reports" on page 13-11.

4. Drag the dimension tiles to the down, page or across positions to determine the report layout. For more information, see "Page layout for Ranking and Exception reports" on page 13-12.

5. Specify ranking, exception, or ranking and exception criteria.

6. Choose **OK**.

## Page layout for Ranking and Exception reports

The Layout area of the Ranking and Exception dialog box enables you to position the dimensions on the page so as to determine the focus of a Ranking and Exception report.

The following list describes the effect of the down, page, and across positions in Ranking and Exception reports:

■ Down position — Only one dimension can be in this position, which the system uses to rank dimension values or to select a subset of values. Do not put Financial Data Item in the down position. Also, if the report is both a ranking report and an asymmetric report, the asymmetric edge cannot be on the down position. The values of the down dimension populate the row labels of the report.

■ Page position — Determines the separate pages of the report. The ranking, exception, or ranking and exception criteria are applied to each page.

■ Across position — Determines the criteria for the ranking, exception, or ranking and exception criteria. The values of the across dimension populate the column labels of the report.

## Example: Ranking and Exception report setup

The following illustration shows the Ranking and Exception Setup dialog box. In this example, Exception then Ranking is selected as the report type. The selections will create a report that displays products for which Actuals exceeded $1 million in

the year 2000 for specified organizations. The report will also rank the five top products.
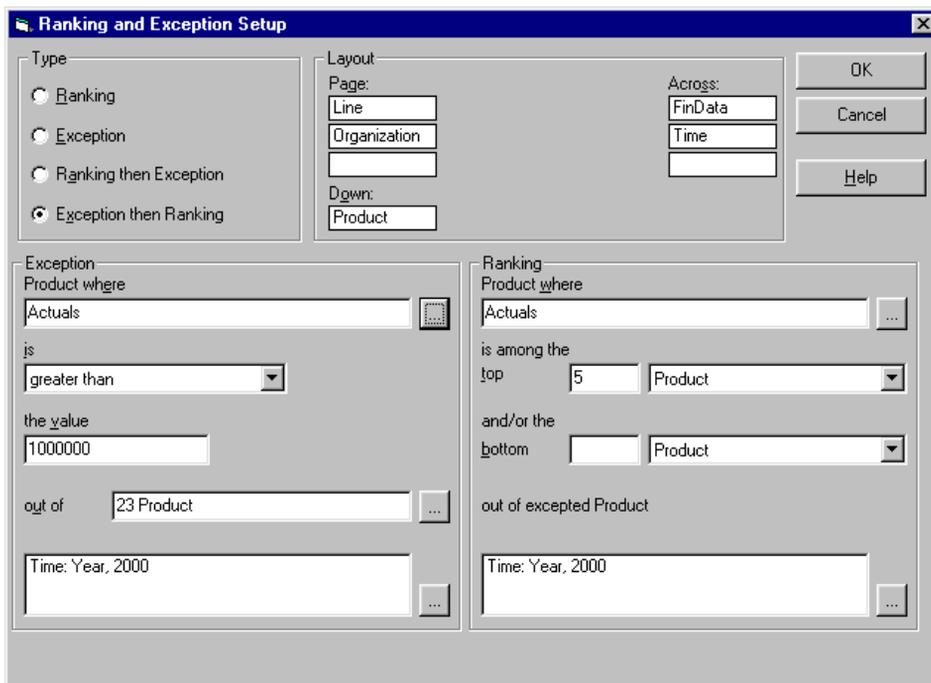


## Display of ranking numbers in report output

Ranking numbers appear in a ranking report and in an exception-then-ranking report next to the values for the down dimension. Ranking numbers are not displayed in a ranking-then-exception report.

## Related information

For more information about ranking and exception reports, search for the following topics in the Financial Analyzer Help system:

"Dimensions of Ranking/Exception Reports"
"Expanding the Base Selection for Ranking/Exception Reports"
"Using Ranking/Exception Reports"

# Using Report Calculations

## About report calculations

When you are working with a Financial Analyzer report, you can define ad hoc formulas to calculate figures such as sums, counts, and averages without having to define a model or a solve definition. These formulas, called *report calculations*, operate only on the data that is currently included in the report.

## When to use report calculations

If you require a temporary formula that you do not need to use in other documents, you can use a report calculation. If, however, you require the same formula frequently or in multiple documents, you should consider using one of the following methods to perform calculations:

- Create a formula financial data item, as described in Chapter 4.

- Add a line item to the Line dimension and incorporate its calculation into a model, as described in Chapter 8.

## Inserting rows and columns for calculations

In order to define a report calculation, you must insert a new row or column in the report and then define a formula for that row or column. When you finish defining the formula, the system populates the appropriate report cells with data calculated using the formula. You can move or delete the column or row as you can any inserted column or row.

If you insert a new report calculation and it conflicts with an existing calculation (for example, if you create a column calculation when a row calculation has already been defined), the most recently inserted report calculation takes precedence.

Inserted rows or columns, and their associated formulas, exist only in the context of the current report. You cannot link inserted rows or columns between reports or gain access to them via the Selector.

## Associating formulas with report cells

You can associate a formula with:

- All of the cells in the current column or row

- Just one cell in a column or row

- Financial data items

You cannot associate a formula with multiple randomly selected cells in a row or column. You must select either just one cell or all cells in a column or row related to a financial data item.

## How inserted calculations relate to dimension values

Inserted rows and columns and their associated formulas can be linked to the dimension to which they are added or to a position in the report. If a row or column is inserted in relation to a particular dimension value, that dimension value becomes the "owner" of the insert. For example, if you insert a row before the dimension value Widgets, Widgets becomes the insert's owner. If you insert a row or column by specifying a position (for example, "after the 2nth FinData"), the inserted row or column stays in the same relative position, even if other dimension values change status, because it is not associated with a particular dimension value.

## How moving dimension values affects calculations

You can move dimension values in reports either by swapping tiles or selecting **Move Insert** from the Edit menu. The following table describes methods of moving dimension values and the effect that each method has on inserted calculations.

| Method of moving a dimension value | Effect on inserted calculations |
|---|---|
| Moving the dimension value that owns the insert to another position in the report | The insert moves with the moved dimension |
| Removing the dimension value that owns the insert from the report by using the Selector to remove the value from status | The insert and its associated formula are deleted from the report |
| Moving the dimension to the page edge of the report | The insert is suppressed, but retained; if the dimension is moved to an across or down position, the insert reappears |
| Hiding the dimension value that owns the insert from the report using drilling | The insert is hidden until the dimension value is redisplayed |

| Method of moving a dimension value | Effect on inserted calculations |
|---|---|
| Moving the inserted column or row that contains the formula relative to another dimension value (by selecting **Move Insert** from the Edit menu) | The insert becomes "owned" by the dimension value that you moved it relative to |
| Moving the inserted column or row that contains the formula positionally (by selecting **Move Insert** from the Edit menu) | The insert is no longer "owned" by a dimension value and will remain in the current position in the report until moved |

## Methods for creating formulas

You can create formulas by:

- Selecting the Formula Tools button on the toolbar and selecting values from the tabs

- Entering the formula manually into the Edit bar

- A combination of entering the formula manually and using the mouse to select dimension values

## Formula construction

Report formulas are always constructed as follows:

```
result = expression
```

where:

- result is the location in the report of the cell or cells where the result will be displayed

- expression is an algebraic expression made up of the following elements: operators, numeric constants, dimension-value pairs, and functions

Note that if you create a formula using Formula Tools, after you exit the Formula Tools dialog box, the newly created formula appears in the edit box, but is not reflected in the report until you select the **Enter** button.

## Using dimension values in formulas

You can include dimension values in report formulas. In report formulas, dimension values:

- Can be displayed either by their description name or by their internal identifier. How they are displayed depends on the Use Internal IDs in Report Calcs setting in the Options dialog box. If Use Internal IDs in Report Calcs is set to **Yes**, dimension values are displayed by their internal identifier. If Use Internal IDs in Report Calcs is set to **No**, dimension values are displayed by their description name. Note that internal IDs are always unique, but description names do not have to be unique. If you choose to display dimension values as their description name, you should ensure that the description name you select for inclusion in your formula is unique to avoid unexpected results.

- Must always be included as part of a dimension-value pair. For example, TIME:JAN00, where TIME is the dimension name, and JAN00 is the dimension value.

- Can only be included if they are in status in the current report.

You cannot use the same dimension-value pair in both the result and expression side of a formula.

## Using qualified data references in formulas

You can use qualified data references, known as *QDRs*, to describe specific cells that are referenced by one or more dimensions. For example, you can use a QDR to reference the cell that represents the Total Assets line item for the year 2000 for the East organization.

QDRs have many uses in report formulas. For example, in the expression side, you can use a QDR to specify that you want to use data contained in a specific cell in a formula. In the results side, you can use a QDR to choose a specific cell into which a formula can be inserted. A useful application for this would be to insert an NA value at the intersection of an inserted row that contains a formula and a column that contains a formula, when neither inserted formula produces an appropriate result.

You use the Qualify tab in the Formula Tools dialog box to create qualified data references (QDRs) to the data in specific cells in the current report.

## Example 1: Applying calculations to rows and columns

The report in this example has two inserted columns and one inserted row for calculated data. For this report:

■ The formula was created using the mouse to select dimension-value pairs from the current report

■ Dimension values are displayed by their description names (as opposed to their internal identifiers)

■ The columns labeled Year to Go and Year to Go % Year, and the Row labeled Operating Income % Revenue have been inserted

■ The Year to Go column contains the following formula:

```
'Time:Year to Go'='Time:Nov 00'+'Time:Dec 00'
```

where:

■ The single quotations (' ') are required delineators

■ Time represents the dimension

■ The colon (:) is a required separator between the dimension and dimension value

■ Time:Year to Go represents the inserted column

■ The plus sign (+) is an operand

■ Nov 00 and Dec 00 are the description names of the dimension values

■ The Year to Go % Year column contains the following formula:

```
'Time:Year to Go % Year'= 'Time:Year to Go'/'Time:Year 00'*100
```

■ The Operating Income % Revenue row contains the following formula:

```
'Line:Operating Income % Revenue'=
'Line:Operating Income'/'Line:Total Revenue'*100
```

After inserting the formulas in the specified cells, the report appears as follows:



## Example 2: Applying a calculation to a specific cell

In the previous example, the number 82% (located at the intersection of the two inserted formulas) is meaningless. To ensure that this value is not misinterpreted, we can replace the incorrect value with an NA value.

For this report, the formula to do this would be as follows:

```
'Line:Operating Income % Revenue;Time:Year to Go % Year
'=NAN()
```

where:

- The single quotations (' ') are required delineators

- Line is the dimension

- The colon (:) is a required separator between the dimension and dimension value

- Operating Income % Revenue is the inserted row

- The semi-colon (;) is a required separator between the two dimension-value pairs

- Time is a dimension

- Year to Go % Year is the inserted column

- NAN( ) is the NAN function, which places an NA value in the specified cell.

To avoid typing mistakes in the long QDR, the results side of the expression was created using the Qualify tab in the Formula Tools dialog box.

After inserting the above formula in the specified cell, the report appears as follows:



Note that in this example, the NA value appears as a dash (-) because that is how NA Spell is specified in report options.

## Report calculation errors

If you enter a formula incorrectly, you will receive an error in the cell into which you were attempting to insert a formula. The following table describes these errors and their meanings.

| Error | Description |
|-------|-------------|
| #CIRC! | The formula contains a circular reference |
| #DIV/0 | The formula is attempting to divide by zero |
| #ERROR! | This is a generic error |
| #MISSING! | The dimension-value pair used in the formula is not currently in status |
| #NAME? | The formula contains a function name that is not recognized |
| #NULL! | The formula contains dimensions that do not intersect in the report |
| #NUM! | There is a problem with a number |
| #OVERFLOW! | The expression evaluates more values than are specified in the result |
| #PAGE! | The dimension-value pair used in the formula is not in the current page |
| #REF! | The formula contains an invalid reference to a cell |
| #VALUE! | The formula contains the wrong type or number of operands |

## Related information

For more information about using calculations in reports, search for the following topics in the Financial Analyzer Help system:

"Defining Formulas for Report Calculations"
"Displaying Internal Identifiers in Report Formulas"
"Defining Formulas for Report Calculations"
"Formula Syntax"
"Inserting Rows or Columns"
"Moving Inserted Rows and Columns"

# Formatting Reports

## About formatting reports

You can use a variety of formatting tools to make a report attractive and easy to read.

## Options for formatting report elements

The following table describes tasks and related Help topics for using Report Options to change the look of your report.

| Task Description | Related Help Topics |
|---|---|
| Specify the precedence order in which column, row, and page formatting changes will take effect | Specifying a Precedence Order for Formatting in Reports |
| Add a title, subtitle, or footnote | ■ Including Titles in Reports<br>■ Including Subtitles in Reports<br>■ Including Footnotes in Reports |
| Edit the row, column, and page control labels that are automatically generated when you create a new report | Editing Dimension Value Labels |
| Change the horizontal and vertical alignment of titles, labels, footnotes, and values in data cells | Aligning Text or Numbers in Reports |
| Automatically suppress rows that contain only zeros, N/A values, or both | Specifying Row Suppression in Reports |
| Place borders around titles or dimension labels in a report | Placing Borders Around Text in Reports |
| Automatically indent row labels to make the structure of hierarchies evident | ■ Indenting Row Titles by Level in Reports<br>■ Specifying the Amount of Indentation for Row Titles in Reports |

## Changing the look of rows and columns

The following table describes tasks and related Help topics for changing the look of rows and columns.

| Task Description | Related Help Topics |
|---|---|
| Insert blank rows to improve readability or include report calculations | Inserting Rows or Columns |
| Insert blank columns to improve readability or include report calculations | Inserting Rows or Columns |
| Move inserted columns or rows | Moving Inserted Rows or Columns |
| Adjust the height of individual rows | Adjusting Row Height in Reports |
| Adjust the width of individual columns | Adjusting Column Width in Reports |

## Other formatting options

The following table describes tasks and related Help topics for other formatting options.

| Description | Related Help Topics |
|---|---|
| Control the way numbers are represented | Choosing a Format for Numbers in Reports |
| Choose fonts, font styles, and point sizes for titles, labels, footnotes, and values in data cells | Choosing Fonts for Text or Numbers in Reports |
| Choose colors for text (such as titles, labels, and footnotes) and for values in data cells | Choosing Colors for Text or Numbers in Reports |
| Choose background colors for text or data cells, and for the report window | Choosing Background Colors in Reports |
| Specify a style, width, and color for borders | Placing Borders Around Text in Reports |
| Insert page breaks | Inserting Page Breaks In Reports And Worksheets |
| Delete page breaks | Deleting Page Breaks from Reports and Worksheets |

## Specifying dimension value labels

As an alternative to manually editing labels for a series of dimension values, you can choose from a set of labels that are already defined for those values. To do this, choose **Dimension Labels** from the Report menu, then select a label type.

## Using the Highlight Special feature

You can use the Highlight Special feature to apply formatting characteristics to all dimension values associated with a dimension in a report. Formatting characteristics applied using Highlight Special:

- Are applied to values on other pages as well as the currently displayed page
- Are applied to dimension values added to a report after the initial formatting occurs
- Can be applied to dimension value labels, data cells, or both

## Showing or hiding report components

You choose **Report Options** from the Report menu to access the Report Options dialog box, which enables you to show or hide elements in the report window, and add or remove components of the report itself. For example, you can show or hide the report title.

## Related information

For more information about formatting reports, search for the following topics in the Financial Analyzer Help system:

"Displaying Dimension Labels in Reports"
"Using the Highlight Special Feature in Reports."

# Saving Reports

## About saving reports

After you create a report, you can save it for use in future work sessions.

When you save a report, only its shell, or form, is saved to disk. The next time you open the report, current data is incorporated into the report's data cells.

## Saving a new report

When you save a new report, you assign it a unique name and, optionally, one or more keywords that can be used to access the document at a later time.

When you save a report under a new name, the system gives you the option of saving it as your default report. This enables you to use the saved report as a starting point the next time you create a new report.

## Saving changes to an existing report

When you save changes to an existing report, you can overwrite the original report (if it belongs to your personal library), or you can save the modified report under a new name and preserve the original.

You choose **Save** to overwrite the original report and **Save As** to save your changes as a new report with a unique name.

## Related information

For more information about saving reports, search for the following topics in the Financial Analyzer Help system:

"Saving New Reports"
"Saving Changes to Reports"

# Managing Reports

## Printing reports

You can print an entire report, the current page, or a set of pages that you specify. You can also print multiple reports.

Choose **Print** from the File menu to print individual reports or **Print Multiple** to print multiple reports. If you choose to do so, you can sequentially number all the pages across all the reports that you print together.

Both Financial Analyzer and Microsoft Windows® provide a wide range of printing options that let you adjust margins, create headers and footers, preview a document before printing, and so on.

## Adding reports to folders

You can organize reports within folders so that users can locate them quickly and easily.

Choose **Maintain Folders** from the Tools menu to add a report to a folder. This opens the Maintain Folders dialog box, where you can select a folder and choose one or more reports to add.

## Deleting reports

You can delete reports from your personal database.

Choose **Delete** from the File menu to delete a report. This opens the Delete dialog box, where you can select a report to delete.

As an administrator, you can also delete a report from the shared database so that users no longer have access to it. You delete the report from your personal database, and then distribute the structure with a Delete from System action, which deletes the structure from the shared database and from the personal databases of all of your users, including any administrators immediately below you in the reporting hierarchy.

## Modifying reports

You can modify a report by making new selections for financial data items and dimension values. You can also add or remove formulas, change the report layout, and modify the formatting.

You can save a modified report under its current name, or under a new name.

## Exporting report data to a file

You can export data from a report to a file that can be used in other applications. You can select from three export formats (.csv, .xls, and .txt), and choose 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

To export data from a report, follow these steps.

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

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

   **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 format for the export file. You can choose one of the following options:

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

   - **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.

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. You can choose one of the following options:

   - **All** — Exports data from all pages of the document.

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

- **Custom Selection** — 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 from a report

The following illustration shows the Export to File dialog box.
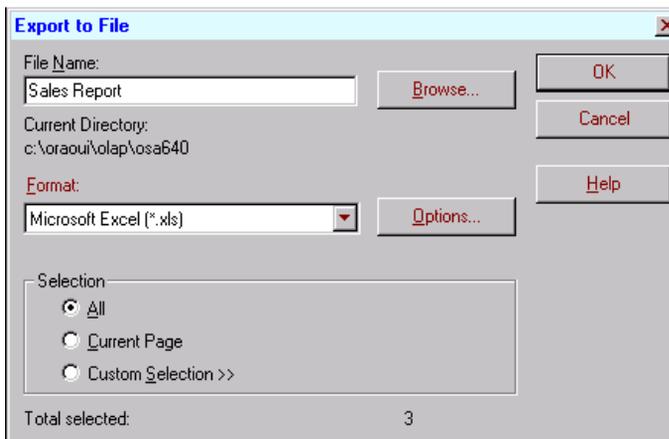
## Related information

For more information about managing reports, search for the following topics in the Financial Analyzer Help system:

"Adding Documents to Folders"
"Adding the Current Report to a Folder"
"Adding Multiple Documents to Folders"
"Deleting Reports."
"Deleting Structures from the System"
"Exporting Report Data to Other Applications."
"Printing Reports."

# Linking Reports

## About linking reports

If you need to create a series of reports that are related in some way, you can link the reports so that the selections and label formatting changes that you make in one document are propagated to all the linked reports.

For example, suppose that you need to prepare a series of reports based on the same set of line items. By creating a series of new reports and linking their Line Item dimensions, you need to select the set of line items only once; the choices you make are automatically applied to all the linked reports. As long as the dimensions are linked, any time you add or remove a line item or change a label associated with a line item, your changes are applied to all the linked reports.

## Rules for linking reports

When linking reports, the following rules apply:

- You can link a series of reports. You cannot link reports with graphs or worksheets.

- You can link only dimensions of the same type (for example, Time with Time, Line Item with Line Item, and so on).

- You can link multiple dimensions with their corresponding dimensions. For example, you might link the Time, Line Item, *and* Organization dimensions across a series of reports.

- You can form a link based on any dimension *except* the FinData dimension.

### Links in saved reports

Links that you create in a report are preserved until you overtly remove them. That is, you can create a link and save and close the document. When you reopen the report, the link remains intact.

### Related information

For more information about linking reports, search for the following topic in the Financial Analyzer Help system: "Linking Dimensions in Reports."

## Drilling through Levels of Data in Reports

### About drilling in reports

The drill feature enables you to view report data at different levels of detail. You can use the drill feature on any dimension that uses a hierarchy to structure dimension values.

In order to use the drill feature, you select a hierarchy and place its corresponding dimension in the down position of the report. Note that you can only use the drill feature when there is no more than one dimension in the down position.

## Example: Drilling in reports

In the report shown in this example, the plus symbol beside each line item indicates that drilling is activated, and that the items have descendants.

When you click on the plus symbol for an item, the dimension value list expands. For example, Cost of Sales and Services has four children: Cost of Sales, Cost of Services-Support, Cost of Services-Consulting, Cost of Services-Training.



## Related information

For more information about drilling, search for the following topic in the Financial Analyzer Help system: "Drilling Through Levels of Report Data."

# 14

# Graphs

## Chapter summary

This chapter describes graphs and how to create, edit and maintain them.

## Who should read this chapter

You need to know the information in this chapter if you are an Administrator, Budget, or Analyst workstation user who is responsible for creating or maintaining graphs.

## List of topics

This chapter includes the following topics:

- About Graphs
- Creating Graphs
- Formatting Graphs
- Specifying Series Formatting for Graphs
- Specifying Axis Formatting for Graphs
- Specifying Formatting for Pie Graphs
- Saving Graphs
- Managing Graphs
- Linking Graphs

# About Graphs

## Definition: Graphs

Graphs enable you to create visual representations of your financial data. You can use graphs to view your financial data from different perspectives, and you can format and print graphs for use in presentations.

## Types of graphs

Financial Analyzer provides a variety of graph types that enable you to represent data in many different ways. For example, some graphs let you emphasize trends over time while other graphs let you show part-to-whole relationships. The following list describes and shows samples of Financial Analyzer's basic graph types.

| Graph Type | Typical Use | Sample |
|---|---|---|
| Line Graph | Shows trends over time and emphasizes rates of change | |
| Vertical Bar Graph | Like a horizontal bar graph, compares data associated with different dimension values | |
| Horizontal Bar Graph | Like a vertical bar graph, compares data associated with different dimension values | |

| Graph Type | Typical Use | Sample |
|---|---|---|
| Bar-Line Graph | Shows relationships between data measured in different units |  |
| Area Graph | Shows trends and emphasizes degrees of change |  |
| Pie Graph | Shows part-to-whole relationships |  |
| Scatter Graph | Shows the relationship between two variables |  |
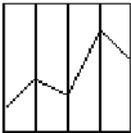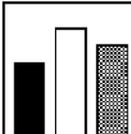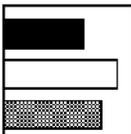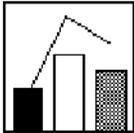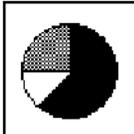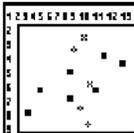
## Graph objects

Graphs enable you view and format financial data based on the financial data items, dimensions, and dimension values that are defined in your personal database. Before you can create a graph, your personal database must contain the required database objects. Administrators typically define database objects and distribute them to users.

## Graph window

The graph window contains various elements that enable you to manipulate a graph's layout and format.

The following illustration shows a vertical bar graph with elements of the graph window labeled.
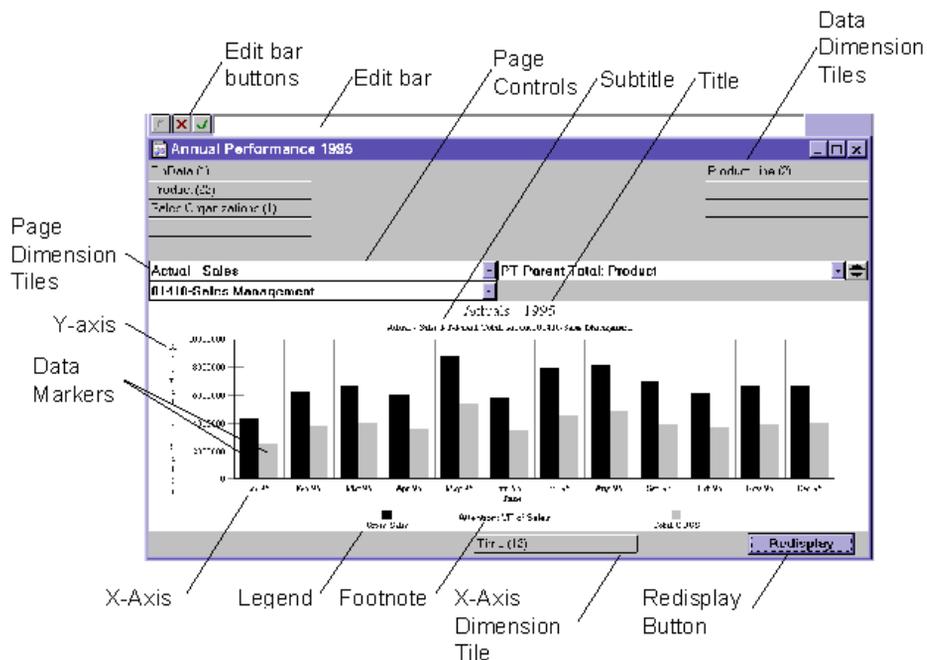
The following table describes each labeled element.

| Element | Description |
|---------|-------------|
| Dimension tiles | Enable you rearrange the layout of a graph and access the Selector dialog box, where you can choose a different set of values for the dimension. There are three types of dimension tiles:<br><br>■ Page dimension tiles — Located in the upper-left corner of the graph window, these tiles represent dimensions in the page position<br><br>■ Across dimension tiles — Located in the upper-right corner of the graph window, these tiles represent dimensions in the across position<br><br>■ Down dimension tiles — Located at the bottom of the graph window, these tiles represent dimensions in the down position |
| Edit bar | Enables you to edit text such as titles, footnotes, and dimension labels. Select the text or data value you want to edit to make it appear in the edit bar. |
| Edit bar buttons | The **Cancel** button clears text from the edit bar.<br><br>❌<br><br>The **Enter** button moves text from the edit bar into the currently selected area.<br><br>✅ |
| Page controls | Enables you to move between pages in a multiple-page graph. |
| Title, subtitle, and footnote panes | Enables you to specify a title, subtitle, and footnote for the graph. |
| Dimension labels | Identifies currently selected dimension values. |
| Redisplay button | Enables you to refresh a document manually after making format or selection changes. |
| X-axis | A graph's horizontal axis. |
| Y-axis | A graph's vertical axis. A graph can have either one or two Y-axes. |
| Data markers | Represent the data shown in a graph. Depending on the type of graph that you are viewing, data markers are either areas, bars, lines, points, or pie slices. |
| Legend | A key to the data represented in a graph. |

## Graph menu

When you open a graph in the document window, the Graph menu becomes available on the menu bar.

The following table describes each item on the Graph menu.

| Menu Item | Description |
|---|---|
| **Type** | Opens the Graph Type dialog box, which enables you to specify the type of graph that you want to use. |
| **Legend** | Opens the Legend dialog box, where you can specify whether to display a legend for your graph. This dialog box also enables you to format the legend. |
| **Pie Options** | Opens the Pie Options dialog box, where you can specify labels for a pie graph and/or its slices and perform other formatting functions. |
| **Grid** | Opens the Grid dialog box, where you can specify whether to display gridlines along the X- and/or Y-axis of a graph. |
| **Graph Options** | Opens the Graph Options dialog box, where you can specify information for graph controls, text, attributes, and axis titles. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Auto Redisplay** | When checked, specifies that graphs are to be automatically redisplayed when you make changes to them.t. |

# Creating Graphs

## About creating graphs

When you create a graph, current financial data is automatically included in the graph. You can base a graph on the default graph template, or on an open graph or report.

## Process for creating graphs

Follow these general steps to create a new graph.

1. Choose **New** from the File menu and then choose **Graph**.

2. Select the data that you want to include in the graph. For more information, see "Selecting data to include in a graph" on page 14-7.

3. You can change the graph type. For more information, see "Types of graphs" on page 14-2.

4. You can adjust the layout of the graph. For more information, see "Changing the layout of a graph" on page 14-7.

5. You can apply formatting to the graph. For more information, see "Formatting Graphs" on page 14-8.

## Selecting data to include in a graph

As part of creating a graph, you must specify which slices of data that you want the graph to include A data slice is defined by a financial data item, multiple dimensions, and a set of values of those dimensions.

For more information on the tools and techniques that are available for selecting data, see Chapter 7.

## Example: Selecting data to include in a graph

Suppose you want to create a graph that compares Actuals data with Budget data. Using the Selector, you would select:

- Both the Actuals and Budget financial data items

- A set of dimension values for each item

For example, if the financial data items are dimensioned by Time, Line Item, and Organization, you would select a set of time periods, line items, and organizations for each financial data item.

## Changing the layout of a graph

Once you have created a graph and selected the data that you want to work with, you can arrange the dimensions according to how you want to view the data. You rearrange dimensions in a graph by changing the positions of the dimension tiles in the graph window. You can move dimension tiles to unoccupied locations or drop labeled tiles onto other labeled tiles to have the dimensions swap positions.

## Related information

For more information about creating graphs, search for the following topics in the Financial Analyzer Help system:

"Choosing Graph Types"
"Creating Graphs"
"Selecting Data"

# Formatting Graphs

## About formatting graphs

You can use a variety of formatting tools to make a graph attractive and easy to read.

## Adding a title, subtitle, or footnote to a graph

As part of formatting a graph, you can add a title, subtitle, or footnote.

## Editing dimension value labels in a graph

You can edit certain dimension value labels that the software automatically generates when you create a new graph. For example, you can edit X-axis labels and legend labels.

## Specifying dimension value labels

As an alternative to manually editing labels for a series of dimension values, you can choose from a set of labels that are already defined for those values. To do this, choose **Dimension Labels** from the Graph menu, then select a label type.

## Choosing a format for the graph legend

Legends serve as keys to data represented in graphs. If you have several data series depicted in a graph, with each series represented by a different marker, a legend helps you associate each marker with its corresponding data series.

When you create a new graph, the software includes a legend that is appropriate for the data shown in the graph. You can modify the legend's location, layout, and label orientation.

## Removing a legend from a graph

You can remove a legend entirely by choosing **Graph Options** from the Graph menu and deselecting the **Show Legend** option.

## Aligning text in a graph

You can change the alignment of text elements such as titles, labels, or footnotes. The alignment options are left, center, and right.

## Choosing a format for numbers in a graph

As part of formatting a graph, you can make various choices that control the way numbers are represented. You can choose:

- The number of decimal places

- To include international currency, scaling, or percent symbols

- To display decimal separators or thousands separators

## Choosing fonts for graph text

You can choose fonts, font styles, and point sizes for titles, labels, and footnotes. You can use multiple fonts in the same document to improve readability or to emphasize important elements. The fonts that are available depend on the printer you have selected.

## Choosing colors and patterns for a graph

To help make your graphs attractive and easy to read, you can select colors and patterns for the following elements:

- Titles, axis labels, legend labels, and footnotes

- Graph area, legend area, and graph window

- Data markers

### Showing or hiding graph components

You can choose **Graph Options** from the Graph menu to show or hide elements in the graph window, and to add or remove components of the graph itself. For example, you can add a Y2-axis to your graph and show or hide its title.

### Related information

For more information about formatting graphs, search for the following topics in the Financial Analyzer Help system:

"Aligning Text in Graphs"
"Applying Patterns to Legends"
"Choosing Background Colors and Patterns in Graphs"
"Choosing Colors and Patterns for Data Markers in Graphs"
"Choosing Colors for Text or Numbers in Graphs"
"Choosing a Format For Numbers in Graphs"
"Choosing Fonts for Text or Numbers in Graphs"
"Choosing Fonts for Legend Text"
"Creating Dimension Values"
"Editing Dimension Value Labels"
"Including Legends in Graphs"
"Including Titles in Graphs"
"Including Subtitles in Graphs"
"Including Footnotes in Graphs"
"Modifying the Location of a Legend in a Graph"
"Modifying the Orientation of a Legend in a Graph"
"Modifying the Placement of a Legend in a Graph"

# Specifying Series Formatting for Graphs

### About series options

The **Series Options** command on the Format menu allows you to emphasize and manipulate the data series depicted in your graph. This section explains how to perform the following tasks:

- Change the shapes of data markers

- Assign a data series to the Y1- or Y2-axis

- Add or remove fit lines

## Changing the shapes of data markers

When you are working with a bar or line graph, you can emphasize a specific data series by changing the shape of its data markers. For example, if you are viewing three data series whose data markers are currently shown as bars, you can emphasize one of the data series by changing its data markers to lines.

## Assigning a data series to the Y1- or Y2-axis

If you are working with a graph that contains both a Y1- and Y2-axis, you can assign any data series in the graph to either axis. This is useful if you want to compare dissimilar data series using different scales.

## Adding and removing fit lines

When you are working with a bar, line, or scatter graph, you can create fit lines to emphasize trends. Fit lines represent a new series of data that is statistically based on an original series. Fit lines, also called trend lines, illustrate how original data series are changed by exponential, linear, or logarithmic calculations.

## Related information

For more information about specifying series options for graphs, search for the following topic in the Financial Analyzer Help system:

"Assigning Data to a Graph's Y-Axis"
"Changing the Shape of Data Markers"
"Including Fit Lines in Graphs"

# Specifying Axis Formatting for Graphs

## Introduction

You can change the appearance of an axis in a graph by adding or changing the format of tick marks and tick labels, or changing the scaling.

Position the mouse on the X, Y1- or Y2-axis on a dual axis graph and click the mouse button when the mouse pointer changes shape. Then choose **Axis Options** from the Format menu. This opens the Axis Options dialog box, where you can specify how you want to change the format of an axis.

### Including tick marks

When working with bar, line, area, or scatter graphs, you can include tick marks on the X- or Y-axis. You can include major tick marks, minor tick marks, or both, and you can position them either inside, outside, or across the selected axis.

### Changing the scale of the Y1- or Y2-axis

When you are working with a bar, line, area, or scatter graph, you can adjust the scale of values on the graph's Y1- or Y2-axis to accommodate the range of data displayed by the graph. You can adjust the scale of each Y-axis independently.

### Arranging X-axis labels

When you are working with a bar, line, area, or scatter graph, you can change the arrangement of the dimension labels that appear below the graph's X-axis. You can change the number of lines each label occupies, stagger the labels, or show only a subset of the labels.

### Related information

For more information about specifying axis format options for graphs, search for the following topics in the Financial Analyzer Help system:

"Changing the Placement of Dimension Labels in Graphs"
"Including Tick Marks in Graphs"
"Scaling Y-Axes in Graphs"

## Specifying Formatting for Pie Graphs

### Introduction

Choose **Pie Options** from the Graph menu to specify formatting for slices in a pie graph.

## Exploding slices in a pie graph

When you set up a pie graph, you can explode one or more slices in the graph for emphasis. You can explode pie slices in the following ways:

- You can explode only the first slice of the pie

- You can select any slice in the pie and explode it

## Labeling each pie in a multiple-pie graph

If you are setting up a pie graph that contains multiple pies, you can include a label for each pie to explain what it represents.

## Labeling pie slices

When you set up a pie graph, you can label the slices of the pie to show what they represent.

## Adding pie slice feelers to a pie graph

If you include pie slice labels when you set up a pie graph, you can include pie slice feelers to connect the labels to the appropriate slices.

## Related information

For more information about format options for pie graphs, search for the following topic in the Financial Analyzer Help system:

"Exploding Slices in Pie Graphs"
"Including Pie Slice Feelers in Pie Graphs"
"Labeling Pie Graphs"
"Labeling Slices in Pie Graphs"

# Saving Graphs

## About saving graphs

After you create a graph, you can save it for use in future work sessions.

When you save a graph, only its shell, or form, is saved to disk. The next time you open the graph, the most current data from your local database is incorporated into the graph's data cells.

## Saving a new graph

When you save a new graph, you assign it a unique name and, optionally, one or more keywords that can be used to access the graph at a later time.

When you save a graph under a new name, the system gives you the option of saving it as your default graph. This enables you to use the saved graph as a starting point the next time you create a new graph.

## Saving changes to an existing graph

When you save changes to an existing graph, you can overwrite the original version (if it belongs to your personal library), or you can save the changed graph under a new name, preserving the original version.

## Related information

For more information about saving graphs, search for the following topics in the Financial Analyzer Help system:

"Saving New Graphs"
"Saving Changes to Graphs"

# Managing Graphs

## Opening and closing graphs

You can open any graph you have previously created, or any graph that your administrator has defined and distributed to you. After you finish working with a graph, you can close it to conserve system resources and save space in the Financial Analyzer window.

## Printing graphs

You can print an entire graph, the current page, or a set of pages you specify.

Both Financial Analyzer and Microsoft Windows provide a wide range of printing options that let you adjust margins, create headers and footers, preview a document before printing, and so on.

## Adding graphs to folders

You can organize graphs within folders so that you can locate them quickly and easily.

Choose **Maintain Folders** from the Tools menu to add a graph to a folder. This opens the Maintain Folders dialog box, where you can choose a folder and select one or more graphs to add.

## Deleting graphs

You can delete graphs that you no longer need from your personal database.

Choose **Delete** from the File menu to delete a graph. This opens the Delete dialog box, where you can select a graph to delete.

As an administrator, you can also delete a graph from the shared database so that users no longer have access to it. You delete the graph from your personal database, and then distribute the structure with a Delete from System action. This deletes the structure from the shared database and from the personal databases of all of your users, including any administrators immediately below you in the reporting hierarchy.

## Modifying graphs

You can modify a graph by making new selections for financial data items and dimension values. You can also change the graph type, change the layout, and modify the formatting.

You can save a modified graph under its current name, or under a new name.

## Exporting graph data to a file

You can export data from your active graph to bitmap (.bmp) file.

### Procedure: Exporting data from a graph

To export data from a graph, follow these steps.

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

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

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

## Related information

For more information about managing graphs, search for the following topics in the Financial Analyzer Help system:

"Adding Documents to Folders"
"Adding the Current Graph to a Folder"
"Adding Multiple Documents to Folders"
"Application Options"
"Closing Graphs"
"Deleting Graphs"
"Exporting Graph Data to Other Applications"
"Opening Graphs"
"Removing Documents From Folders"

# Linking Graphs

## Introduction

If you need to create a series of graphs that are related in some way, you can link the graphs so that selections you make in one document are propagated to all the linked documents.

For example, suppose that you need to prepare a series of graphs based on the same set of line items. By creating a series of new graphs and linking their Line Item dimensions, you need to select the set of line items only once; the choices you make are automatically applied to all the linked graphs. As long as the dimensions are linked, any time you add or remove a line item or change a label associated with a line item, your changes are applied to all the linked graphs.

## Rules for linking graphs

When linking graphs, the following rules apply:

- You can link a series of graphs. You cannot link graphs with reports or worksheets.

- You can link only dimensions of the same type (for example, Time with Time, Line Item with Line Item, and so on).

- You can link multiple dimensions with their corresponding dimensions. For example, you might link the Time, Line Item, *and* Organization dimensions across a series of graphs.

- You can form a link based on any dimension *except* the FinData dimension.

## Saving links

Links that you create in a graph are preserved until you overtly remove them. That is, you can create a link and save and close the graph. When you reopen the document, the link remains intact.

## Related information

For more information about rules for linking graphs, search for the following topic in the Financial Analyzer Help system: "Linking Dimensions in Graphs."

# 15

# Worksheets

## Chapter summary

This chapter describes how to create and use worksheets.

## Who should read this chapter

Read this chapter if you are an Administrator, Budget or Analyst workstation user who is responsible for creating or maintaining worksheets.

## List of topics

This chapter includes the following topics:

- About Worksheets

- Creating Worksheets

- Formatting Worksheets

- Entering Data in Worksheets

- Calculating Data in Worksheets

- Saving Worksheets

- Managing Worksheets

- Linking Worksheets

- Drilling Through Levels of Data in Worksheets

# About Worksheets

## Definition: Worksheet

A worksheet is a tool you can use to:

- Enter new financial data into your database

- Make changes to existing data

- Drill through levels of data

- Perform calculations such as growing, spreading, and increasing data

Worksheets allow you to view multiple slices of financial data from different perspectives. In addition, they allow you to *change* the values in data cells. You can enter data manually or have the software populate worksheet cells based on instructions that you provide.

Since worksheets enable you to enter, drill down, and perform calculations on data, they are essential for developing budgets, forecasts, and what-if analyses.

## Worksheet objects

Worksheets let you view and manipulate financial data based on the financial data items, dimensions, and dimension values that are currently defined in your personal database. Administrators typically define these and other database objects and distribute them to users.

## Worksheet window

The worksheet window contains various elements that enable you to manipulate a worksheet's layout and format.

The following illustration shows a worksheet and its elements.
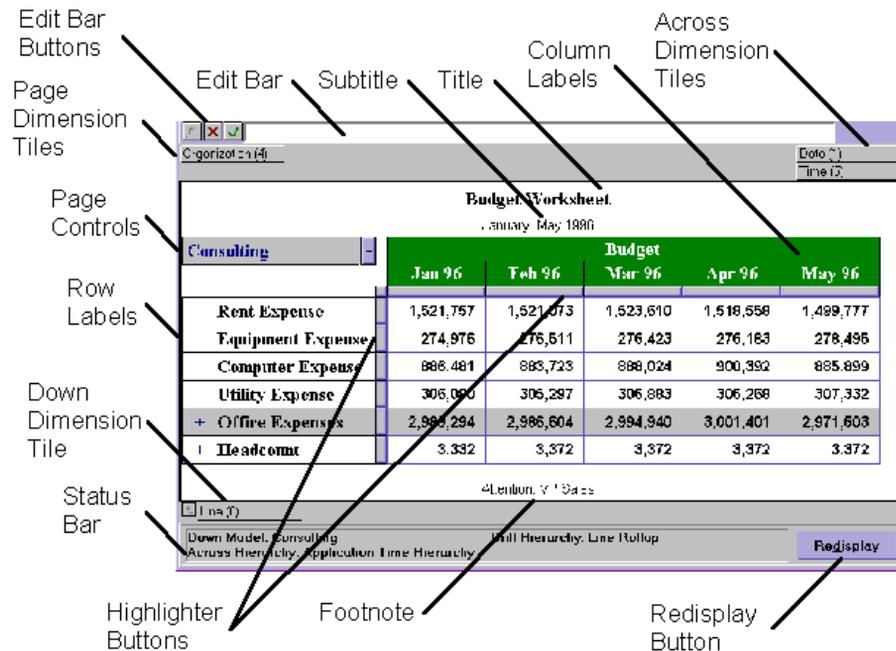


This table describes the elements of the worksheet window.

| Element | Description |
|---------|-------------|
| Dimension tiles | Enable you to rearrange the layout of a worksheet and access the Selector dialog box, where you can choose a different set of values for the dimension. There are three types of dimension tiles:<br><br>■ Page dimension tiles — Located in the upper-left corner of the worksheet window, these tiles represent dimensions in the page position<br><br>■ Across dimension tiles — Located in the upper-right corner of the worksheet window, these tiles represent dimensions in the across position<br><br>■ Down dimension tiles — Located at the bottom of the worksheet window, these tiles represent dimensions in the down position |
| Edit bar | Enables you to edit text (such as titles, footnotes, and dimension labels) and individual data values. Select the text or data value you want to edit to make it appear in the edit bar. |

| Element | Description |
|---|---|
| Edit bar buttons | The **Cancel** button clears text from the edit bar.<br><br>❎<br><br>The **Enter** button moves text from the edit bar into the currently selected area.<br><br>☑ |
| Page controls | Enable you to move between pages in a multiple-page worksheet. |
| Title, subtitle, and footnote panes | Enable you to specify a title, subtitle, and footnote. |
| Row and column labels | Identifies currently selected dimension values. |
| Highlighter buttons | Enables you to select data cells for performing calculations or formatting. You can select a single row or column, a series of rows or columns, or the entire body of the worksheet. |
| Redisplay button | Enables you to refresh a worksheet manually after making format or selection changes. |
| Status bar | Displays information about currently selected models or hierarchies. |

## Worksheet menu

When you create a new worksheet or open a worksheet, the Worksheet menu becomes available on the menu bar.

The following table describes each item on the Worksheet menu.

| Menu item | Description |
|---|---|
| **Worksheet Options** | Enables you to perform the following functions:<br><br>■ Show or hide worksheet window elements such as page controls, highlighter buttons, scroll bars, status bar, and dimension tiles.<br><br>■ Show or hide text elements, such as titles, subtitles, and footnotes.<br><br>■ Show or hide gridlines.<br><br>■ Specify a null value symbol and a precedence order for formatting. Also specify whether to display numbers in the edit bar in actual or truncated format.<br><br>■ Apply a filtering attribute to budget worksheet rows based on the dimension value shown in the page.<br><br>■ Specify that you want labels to accompany data when you copy data values to the clipboard. |
| **Dimension Labels** | Opens the Dimension Label Setup dialog box, where you can specify the text that the system will use when it creates row, column, and page labels. |
| **Drill** | When checked, enables drilling in worksheets. |

| Menu item | Description |
|---|---|
| **Auto Redisplay** | When checked, specifies that worksheets are to be automatically redisplayed when you make changes to them. |
| **Worksheet Tools** | Displays a cascading menu, from which you can select options that enable you to perform calculations on data. You can also access this menu by clicking the right mouse button with the cursor positioned anywhere in the body of the worksheet. |
| | ■ **Grow Data** — Enables you to "grow" data over a range of cells by an amount or percentage you specify. For more information, see "Growing data" on page 15-22. |
| | ■ **Increase Data** — Enables you to increase data over a range of cells by a constant value. For more information, see "Increasing data" on page 15-23. |
| | ■ **Spread Data** — Enables you to spread data within a hierarchy from parents to children or all descendants. For more information, see "Spreading data" on page 15-23. |
| | ■ **Recalculate** — Recalculates worksheet data based on any models or hierarchies that are currently selected. |
| | ■ **Recalc Options** — Enables you to specify parameters for recalculating data. |
| | ■ **Save Data** (Administrator and Budget Workstations only) — Saves worksheet data to your personal database. |
| | ■ **Reset Data** — Returns worksheet data to the values that were displayed when the worksheet was last opened or the worksheet data was last saved. |

# Creating Worksheets

## About creating worksheets

When you create a worksheet, current financial data from your personal database is automatically included in the worksheet. You can base a worksheet on the default worksheet template or on an open worksheet.

## Process for creating worksheets

Follow these general steps to create a new worksheet:

1.  Choose **New** from the File menu and then choose **Worksheet**.

2.  Select the data that you want to include in the worksheet. For more information, see "Selecting data to include in a worksheet" on page 15-7.

3.  You can adjust the layout of the worksheet. For more information, see "Changing the layout of a worksheet" on page 15-8.

4.  You can perform calculations such as growing data, increasing data, and spreading data. For more information, see "Calculating Data in Worksheets" on page 15-22.

5.  You can apply formatting to the worksheet. For more information, see "Formatting Worksheets" on page 15-11.

## Selecting data to include in a worksheet

You specify the slices of data that you want to include in the worksheet. A data slice is defined by a financial data item and a set of dimension values.

For more information on the tools and techniques that are available for selecting data, see Chapter 7.

## Requirements for worksheet data

Unlike reports and graphs, which allow you to include multiple financial data items in the same document, worksheets allow you to work with only one financial data item at a time.

Worksheets permit you to work with *stored financial data items* only. You cannot include *formula financial data items* in worksheets.

## Example: Selecting data for a worksheet

Suppose you want to work with Actuals data. Using the Selector, you would:

■   Select the Actuals financial data item

■   Select a set of dimension values for that item

For example, if Actuals is dimensioned by Time, Line Item, and Organization, you would select a set of time periods, line items, and organizations.

## Changing the layout of a worksheet

Once you have created a worksheet and selected the data that you want to work with, you can arrange the dimensions according to how you want to view the data. You rearrange dimensions in a worksheet by changing the positions of the dimension tiles in the worksheet window.

## Example: Changing the layout of a worksheet

In the sample worksheet shown following:

- The Commercial Sales and Parent Total: Product dimensions occupy the page position.

- The Financial Data and Time dimensions occupy the across position.

- The Line dimension occupies the down position.

Each page of the worksheet displays data associated with multiple line items and time periods for a single organization and product line.

To view data for multiple product lines on the same page, you could drag the Product tile and drop it on the Time tile to have the corresponding dimensions swap positions, as shown in the following illustration.

If you wanted to change your view of the data to reflect a single line item and time period and multiple products and sales organizations, you could swap the Organization and Line tiles. The following illustration shows the results.



You could continue to rearrange tiles to yield as many different views of the data as you needed.

## Tip: Paging through a worksheet

To quickly page through an open worksheet, select the paging dimension by clicking on it and press Alt+Page Up or Alt+Page Down.

## Related information

For more information about creating worksheets, search for the following topics in the Financial Analyzer Help system:

"Creating Worksheets"
"Selecting Data"

# Formatting Worksheets

## About formatting worksheets

You can use a variety of formatting tools to make a worksheet attractive and easy to read.

## Options for formatting worksheet elements

The following table describes tasks and related Help topics for using Worksheet Options to change the appearance of a worksheet.

| Task Description | Related Help Topics |
| --- | --- |
| Specify the precedence order in which column, row, and page formatting changes will take effect | Specifying a Precedence Order for Formatting in Worksheets |
| Add a title, subtitle, or footnote | ■ Including Titles in Worksheets<br><br>■ Including Subtitles in Worksheets<br><br>■ Including Footnotes in Worksheets |
| Edit the row, column, and page control labels that are automatically generated when you create new worksheets | Editing Dimension Value Labels |
| Change the horizontal and vertical alignment of titles, labels, footnotes, and values in data cells | Aligning Text or Numbers in Worksheets |
| Place borders around titles or dimension labels | Placing Borders Around Text in Worksheets |
| Automatically indent row labels to make the structure of hierarchies evident | ■ Indenting Row Titles by Level in Worksheets<br><br>■ Specifying the Amount of Indentation for Row Titles in Worksheets |

## Changing the look of rows and columns

The following table describes tasks and related Help topics for changing the look of rows and columns in a worksheet.

| Task Description | Related Help Topics |
|---|---|
| Insert blank rows to improve readability | Inserting Rows or Columns |
| Insert blank columns to improve readability | Inserting Rows or Columns |
| Adjust the height of individual rows | Adjusting Row Height in Worksheets |
| Adjust the width of individual columns | Adjusting Column Width in Worksheets |

## Other formatting tasks

The following table describes other formatting tasks.

| Task Description | Related Help Topics |
|---|---|
| Control the way numbers are represented | Choosing a Format for Numbers in Worksheets |
| Choose fonts, font styles, and point sizes for titles, labels, footnotes, and values in data cells | Choosing Fonts for Text or Numbers in Worksheets |
| Choose colors for text (such as titles, labels, and footnotes) and for values in data cells | Choosing Colors for Text or Numbers in Worksheets |
| Choose background colors for text or data cells, and for the worksheet window | Choosing Background Colors in Worksheets |
| Specify a style, width, and color for borders | Placing Borders Around Text in Worksheets |
| Insert page breaks | Inserting Page Breaks In Reports And Worksheets |
| Delete page breaks | Deleting Page Breaks from Reports and Worksheets |

## Specifying dimension value labels

As an alternative to manually editing labels for a series of dimension values, you can choose from a set of labels that are already defined for those values. To do this, choose **Dimension Labels** from the Worksheet menu, then select a label type.

## Using the Highlight Special feature

You can use the Highlight Special feature to apply formatting characteristics to all dimension values associated with a dimension in a worksheet. Formatting characteristics applied using Highlight Special:

- Are applied to values on other pages as well as the currently displayed page

- Are applied to dimension values added to a worksheet after the initial formatting occurs

- Can be applied to dimension value labels, data cells, or both

## Related information

For more information, search for the following topics in the Financial Analyzer Help system:

"Displaying Dimension Labels in Worksheets"
"Using the Highlight Special Feature in Worksheets"

# Managing Worksheets

## Opening and closing worksheets

You can open any worksheet that you have previously created, or any worksheet that your administrator has defined and distributed to you. You can open only one worksheet at a time. When you finish using a worksheet, it is best to close it to conserve system resources and save space in the Financial Analyzer window.

## Printing worksheets

You can print the worksheets that you create. You can print an entire worksheet, the current page, or a set of pages you specify. You can also print multiple worksheets.

Choose **Print** from the File menu to print individual worksheets. Choose **Print Multiple** to print multiple worksheets in a single print session. If you choose to do so, you can sequentially number all the pages across all the worksheets that you print together.

Both Financial Analyzer and Microsoft Windows provide a wide range of printing options that let you adjust margins, create headers and footers, preview a document before printing, and so on.

## Adding worksheets to folders

You can organize worksheets within folders so that users can locate them quickly and easily.

Choose **Maintain Folders** from the Tools menu to add a worksheet to a folder. This opens the Maintain Folders dialog box, where you can choose a folder and select one or more worksheets to add.

## Deleting worksheets

You can delete worksheets that you have created from your personal database.

Choose **Delete** from the File menu to delete a worksheet. This opens the Delete dialog box, where you can select a worksheet to delete.

As an administrator, you can also delete a worksheet from the shared database so that users no longer have access to it. You delete the worksheet from your personal database, and then distribute the structure with a Delete from System action, which deletes the structure from the shared database and from the personal databases of all of your users, including any administrators immediately below you in the reporting hierarchy.

## Exporting worksheet data to a file

You can export data from a worksheet to a file that can be used in Microsoft Excel and other applications. You can select from three export formats (.csv, .xls, and .txt), and choose 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 worksheet

To export data from a worksheet, follow these steps.

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

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

   **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 format for the export file. You can choose one of the following options:

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

   - **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.

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. You can choose one of the following options:

   - **All** — Exports data from all pages of the document.

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

   - **Custom Selection** — 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.

## Related information

For more information about managing worksheets, search for the following topics in the Financial Analyzer Help system:

"Adding Documents to Folders"
"Adding the Current Worksheet to a Folder"
"Adding Multiple Documents to Folders"
"Closing Worksheets"
"Deleting Worksheets"
"Exporting Worksheet Data to Other Applications"
"Opening Worksheets"
"Printing Worksheets"

# Saving Worksheets

## About saving worksheets

After you create a worksheet, you can save it for use in future work sessions.

When you save a worksheet, only its shell, or form, is saved to disk. The next time you open the worksheet, current data is incorporated into the worksheet's data cells.

## Saving a new worksheet

When you save a new worksheet, you assign it a unique name and, optionally, one or more keywords that can be used to access the document at a later time.

When you save a worksheet under a new name, the system gives you the option of saving it as your default worksheet. This enables you to use the saved worksheet as a starting point the next time you create a new worksheet.

## Saving changes to an existing worksheet

When you save changes to an existing worksheet, you can overwrite the original worksheet (if it belongs to your personal library), or you can save the modified worksheet under a new name and preserve the original.

You choose **Save** to overwrite the original worksheet and **Save As** to save your changes as a new worksheet with a unique name.

## Saving worksheet data from a Budget workstation

When you save a worksheet from a Budget workstation, both the worksheet specification *and* any new data that you entered into the worksheet are saved to your personal database. If you want to save the data without saving the worksheet specification (for example, if the worksheet belongs to the administrator's library and you cannot resave it), from the toolbar choose



Alternatively, you can choose **Worksheet Tools** from the Worksheet menu and then choose **Save Data**.

## Saving data from an Analyst workstation

When you save a worksheet from an Analyst workstation, Financial Analyzer automatically submits any data that you have entered or changed to the shared database.

## Related information

For more information about saving worksheets, search for the following topics in the Financial Analyzer Help system:

"Saving New Worksheets"
"Saving Changes to Worksheets"
"Saving Worksheet Data"

# Linking Worksheets

## About linking worksheets

If you need to create a series of worksheets that are related in some way (such as multiple versions of a budget or forecast), you can link the worksheets so that selections and label formatting changes that you make in one worksheet are propagated to all the linked worksheets.

For example, suppose that you need to prepare a series of worksheets based on the same set of line items. By creating a series of new worksheets and linking their Line Item dimensions, you need to select the set of line items only once; the choices that you make are automatically applied to all the linked worksheets. As long as the dimensions are linked, any time you add or remove a line item or change a label associated with a line item, your changes are applied to all the linked worksheets.

## Rules for linking worksheets

When linking worksheets, the following rules apply:

- You can link a series of worksheets. You cannot link worksheets with graphs or reports.

- You can link only dimensions of the same type (for example, Time with Time, Line Item with Line Item, and so on).

- You can link multiple dimensions with their corresponding dimensions. For example, you might link the Time, Line Item, *and* Organization dimensions across a series of worksheets.

- You can form a link based on any dimension *except* the FinData dimension.

## Links in saved worksheets

Links that you create in a worksheet are preserved until you overtly remove them. That is, you can create a link and save and close the worksheet. When you reopen the worksheet, the link remains intact.

## Related information

For more information about linking worksheets, search for the following topic in the Financial Analyzer Help system: "Linking Dimensions in Worksheets."

# Drilling Through Levels of Data in Worksheets

## About drilling in worksheets

The drill feature enables you to view worksheet data at different levels of detail. You can use the drill feature on any dimension that uses a hierarchy to structure dimension values.

In order to use the drill feature, you select a hierarchy and place its corresponding dimension in the down position of the worksheet. Note that you can only use the drill feature when there is no more than one dimension in the down position.

## Example: Drilling through data in a worksheet

In the following illustration, the plus symbol beside Consulting indicates that drilling is activated, and that Consulting has descendants.

When you click on the plus symbol, the dimension value list expands to show that Consulting has three children: Consulting East, Consulting Central, and Consulting West.



## Related information

For more information about drilling, search for the following topic in the Financial Analyzer Help system: "Drilling Through Levels of Worksheet Data."

# Entering Data in Worksheets

## About data entry

You enter financial data by opening a worksheet, inputting individual data values into the worksheet's cells, and saving the data to your personal database. You can then submit the data to the shared database, making your work available to other users.

## Note: Zero values in worksheets

Zero values entered into budget worksheets are stored in the database as NA values. Zero values entered into worksheets through a data reader are stored as zeros.

## Recalculating data

If you enter new data in a worksheet or change data used to calculate other values, you can use the recalculate feature to refresh all the data in the worksheet.

If you are recalculating data along a hierarchy or according to a model, you need to specify the appropriate recalculation options before you use the recalculate feature. The options that you specify are retained in the worksheet until you change them.

## Note: Data affected by recalculating

When you recalculate data in a worksheet, the recalculation affects only the data slice that is currently selected for display in the worksheet. To recalculate data beyond the boundaries of the worksheet, use a solve definition or a group solve definition. For information about solving data, refer to Chapter 9.

## Saving data

If you want to save data without saving the worksheet, from the toolbar choose:



or choose **Worksheet Tools** from the Worksheet menu nd then choose **Save Data**.

## Resetting data

If you decide not to keep changes that you make to data in a worksheet, but you want to continue using the worksheet, you can reset its data. You can only reset data that has not been saved. Once data is saved in a worksheet, you cannot reset it.

To reset data, choose **Reset Data** from the Worksheet Tools menu.

## Related information

For more information about entering data in worksheets, search for the following topics in the Financial Analyzer Help system:

"Calculating Worksheet Data"
"Entering Data into Worksheets"
"Resetting Worksheet Data"
"Saving Worksheet Data"

# Calculating Data in Worksheets

## About calculations in worksheets

You can use worksheets to perform calculations on data in your database. The following sections describe the types of calculations that you can perform.

## Growing data

You can *grow* data in a worksheet by an amount or percentage over a range of cells. The first data value in the range remains unchanged and is used as the base value upon which the calculation is performed. Each subsequent value in the range grows by the specified amount or percentage as compared to the base value.

## Example: Growing data

Suppose that in each month of the last quarter of 2000, Volume Sales for Product A are reforecast to be 5% higher than the month before. By orienting a worksheet to reflect 2000 forecast data with months in the across position, you could select three cells representing Product A Volume Sales for October through December.

If you grew the data values across columns by 5%:

- October's values would remain unchanged

- November's values would be 5% higher than October's

- December's values would be 5% higher than November's

## Increasing data

You can *increase* data in a worksheet by a constant amount or percentage. You can increase values in individual cells or over a range of cells spanning rows, columns, or both.

## Example: Increasing data

Suppose that, for each month of the fourth quarter of 2000, Volume Sales for Product A are reforecast to be 5% higher than the corresponding figures in the previous forecast. By orienting a worksheet to reflect 2000 forecast data with months in the across position, you could select the three cells representing Volume Sales for Product A for November through December. You could then increase each of these values by 5%. Each new value would, therefore, be 5% higher than its original value.

## Spreading data

You can use the Spread Data tool to *spread* data in a worksheet from a parent value in a hierarchy to its descendants. There are three different ways to spread data:

- Evenly, so that each descendant receives an equivalent amount

- Proportionally, so the descendants retain their original relationships to the parent

- Based on the proportions in another dimension value

You can spread data either down columns or across rows in a worksheet.

## Example 1: Spreading data evenly

Suppose that Expenses for the fourth quarter of 2000 are initially forecast to be $60,000 and is then reforecast to be $120,000. Suppose, too, that you want to determine the effect of the reforecast on the figures for each month in the quarter,

and you want the change to be *evenly spread* to each month. You could use an even spreading method to generate the figures shown in italics.

|  | Oct 00 | Nov 00 | Dec 00 | Q4 00 |
|---|---|---|---|---|
| Expenses (forecast 1) | $10,000 | $20,000 | $30,000 | $60,000 |
| Expenses (forecast 2) | *$40,000* | *$40,000* | *$40,000* | $120,000 |

## Example 2: Spreading data proportionally

Suppose that Expenses for the fourth quarter of 2000 are reforecast from $60,000 to $120,000. Suppose, too, that you want to determine the effect of the reforecast on the figure for each month in the quarter, and that you want each month's figure to *retain its original proportion* to the total for the quarter. You could use a proportional spreading method to generate the figures shown in italics.

|  | Oct 00 | Nov 00 | Dec 00 | Q4 00 |
|---|---|---|---|---|
| Expenses (forecast 1) | $10,000 | $20,000 | $30,000 | $60,000 |
| Expenses (forecast 2) | *$20,000* | *$40,000* | *$60,000* | $120,000 |

## Example 3: Spreading data based on another dimension value

Suppose that Expenses for the fourth quarter of 2000 are reforecast to be $120,000 and that you want to determine the effect of the reforecast on the figures for each month in the quarter so that monthly figures *adopt the proportions in another dimension value* (in this case, Sales). You could use the spread data tool to generate the figures shown in italics.

|  | Oct 00 | Nov 00 | Dec 00 | Q4 00 |
|---|---|---|---|---|
| Sales | $60,000 | $90,000 | $30,000 | $180,000 |
| Expenses | *$40,000* | *$60,000* | *$20,000* | $120,000 |

## Example: Spreading data to visible elements only

In this example:

- Expenses for the fourth quarter of 2000 are forecast to be $60,000

- You want to determine the effect of the forecast on the figures for each month in the quarter

- You want the change to be evenly spread to each month

In the worksheet, the months of Nov 00 and Dec 00 are visible, but Oct 00 is not. In the following scenario, there is no value for October, so the $60,000 is distributed evenly between Nov 00 and Dec 00.

|  | Oct 00 | Nov 00 | Dec 00 | Q4 00 |
|---|---|---|---|---|
| Expenses (forecast 1) |  | $30,000 | $30,000 | $60,000 |

In the next scenario, Oct 00 has a value of $10,000. Spread deducts this value from the $60,000 leaving $50,000 to spread evenly between Nov 00 and Dec 00.

|  | Oct 00 | Nov 00 | Dec 00 | Q4 00 |
|---|---|---|---|---|
| Expenses (forecast 1) |  | $30,000 | $30,000 | $60,000 |
| Expenses (forecast 2) | $10,000 | $25,000 | $25,000 | $60,000 |

## Related information

For more information about calculating data in worksheets, search for the following topics in the Financial Analyzer Help system:

"Growing Worksheet Data"
"Increasing Worksheet Data"
"Spreading Worksheet Data"

# 16

# Data Entry Forms

## Chapter summary

This chapter describes how to create and maintain data entry forms.

## Who should read this chapter

Read this chapter if you are an administrator who is responsible for creating and maintaining data entry forms.

## List of topics

This chapter includes the following topics:

- About Data Entry Forms
- Creating Data Entry Forms
- Specifying Display Options for Data Entry Forms
- Associating Solve Definitions with Data Entry Forms
- Specifying Numeric Formats for Financial Data Items in Data Entry Forms
- Selecting Dimension Label Types for Data Entry Forms
- Formatting Data Entry Forms
- Including Asymmetric Formatting in Data Entry Forms
- Preventing Users From Overwriting Data in Data Entry Forms
- Saving Data Entry Forms
- Previewing Data Entry Forms
- Managing Data Entry Forms

# About Data Entry Forms

## Definition: Data entry forms

Data entry forms support Web-based data collection. An authorized user who has a browser can use a data entry form to accomplish the following tasks:

- Enter new data into the shared database

- Make changes to existing data in the shared database

- Calculate summary data based on data that is newly entered

Data entry forms are designed for controlled data collection. Although users can enter data and run predefined calculations, they cannot use the forms to develop budgets, forecasts, and what-if analyses.

## Data entry form workflow

An administrator creates a data entry form on an Administrator workstation in the Windows client and distributes the forms to the appropriate users. The administrator can distribute data entry forms to any type of user: administrator, budget, analyst, and external.

A user accesses the data entry form through the Web interface. He or she opens the form and enters or modifies data.

When data entry is complete, the user submits the data to the shared database. If a solve definition has been associated with one or more financial data items in the form, the data is recalculated.

# Creating Data Entry Forms

## About creating data entry forms

You create data entry forms on an Administrator workstation in the Windows client interface.

## Data entry form content

Data entry forms can include the following:

- One or more financial data items. Optionally, you can associate a solve definition with a financial data item.

- Stored financial data items and formula financial data items.

- Numeric financial data items and text financial data items.

## Data Entry Form menu

When you create a new data entry form or open an existing data entry form on an Administrator workstation, the Data Entry Form menu becomes available on the menu bar.

The following table describes the options on the Data Entry Form menu.

| Menu item | Function |
|---|---|
| **Form Options** | Specify elements that will display in a data entry form. You can:<br><br>- Display text elements such as title, subtitle, and footnote.<br>- Enter annotations.<br>- Specify how NA (unavailable) data will be displayed.<br>- Specify a precedence for resolving formatting conflicts.<br>- Apply an filtering attribute to the data entry form rows based on the dimension value shown in the page.<br>- Specify whether the Web interface will highlight modified cells when users enter or change data.<br>- Specify whether the Web interface will display text tool tips that describe the status of data in each cell. |
| **Data Options** | Use the Number Format submenu to specify the number format (positive, negative, decimal) for a financial data item.<br><br>Use the Calculations submenu to associate a solve definition with a financial data item. |
| **Dimension Labels** | Specify the text that the system will use for row, column, and page labels. |
| **Auto Redisplay** | When this option is turned on, a data entry form is automatically redisplayed after a change in layout or dimension selections. |
| **Asymmetric Format** | Join the values of two objects and create a custom asymmetric arrangement of their values. |

## Process for creating a data entry form

Follow these steps to create a new data entry form:

1. From the File menu, choose **New**.

   **Result:** A list of document types appears.

2. From the list of document types, choose **Data Entry Form** and click **OK**.

3. Using the Selector, select financial data items, dimensions and dimension values for the form. For more information about selecting dimension values, see Chapter 7.

   You can select text financial data items as well as numeric financial data items.

4. Arrange the layout of the dimensions by moving and swapping dimension tiles in the row, column, or page positions.

5. You can specify display options for the form. For example, you can apply a filtering attribute to the rows based on the dimension value shown in the page. You can also specify a title, subtitle, footnote, and annotations. For more information about display options, see "Specifying Display Options for Data Entry Forms" on page 16-6.

6. You can associate a solve definition with one or more financial data items in the form. For more information, see "Associating Solve Definitions with Data Entry Forms" on page 16-9.

7. You can apply positive, negative, and decimal formats to a financial data item in the form. For more information, see "Specifying Numeric Formats for Financial Data Items in Data Entry Forms" on page 16-10.

8. You can specify the type of labels to display for dimensions in the form. For more information, see "Selecting Dimension Label Types for Data Entry Forms" on page 16-11.

9. You can choose font styles, and point sizes for titles, subtitles, footnotes, labels, and data values. For more information, see "Formatting Data Entry Forms" on page 16-12.

10. You can combine the values of two dimensions, or the values of a dimension and a financial data item to create an asymmetric combination. For more

information, see "Including Asymmetric Formatting in Data Entry Forms" on page 16-14.

11. You can lock specific data cells so that users cannot overwrite data. For more information, see "Preventing Users From Overwriting Data in Data Entry Forms" on page 16-15.

## Example: Data entry form on Administrator workstation

The following illustration shows how a data entry form might look after an administrator creates the form on an Administrator workstation.



## Related information

For more information, search for the topic "Creating a Data Entry Form" in the Financial Analyzer Help system.

# Specifying Display Options for Data Entry Forms

## About data entry form display options

You can specify the following display options for a data entry form:

- A title, subtitle, and footnote

- Annotations above and below the body of the form

- Formatting precedence, row filtering attribute, how NA (unavailable) and zero data display, and how changed cells appear to end users.

## Procedure: Specifying display options for a data entry form

To specify display elements for a data entry form, follow these steps:

1. From the Data Entry Form menu, choose **Form Options**.

   **Result:** The Form Options dialog box appears, showing the current settings.

2. To add a title, subtitle, or footnote to the data entry form, in the Titles box click each text element that you want to include. The form displays default

   a. Click the default text and use the edit bar to enter new text.

   b. You can format the text, as described in the topic "Procedure: Applying colors and font styles to a data entry form" on page 16-13.

3. In the Data box, you can enter or modify the following settings:

   - **NA Spell** — Enter a character, symbol or term (up to 31 characters) that will be substituted for NA (unavailable) data values.

   - **Formatting Order** — Specify the precedence in which formatting characteristics will be applied to cells in the data entry form when conflicts occur.

   - **Row Filtering Attribute** — Select a row filtering attribute for the data entry form. For more information about setting up and applying a filtering attribute, see "Using a row filtering attribute" on page 16-7.

   - **Highlight Changed Cells** — Specify that the Web interface will highlight cells based on the status of the data in the cells. When you choose this option, cells into which a user enters or pastes data will be displayed on a blue background. Data that has been submitted to the task processor will be displayed on a green background with bold, italicized font.

- **Tool Tips for Changed Cells** — Specify that the Web interface will provide text that describes cells based on the status of their data. When you choose this option, tool tips will notify users when the mouse passes over cells that are unchanged, modified, locked, or for which data has been submitted.

4. In the Annotations box, you can enter text that will appear above the body of the form and text that will appear below the body of the form. You can enter plain text or provide a URL link.

5. Choose **OK** to apply your selections to the data entry form.

## Using a row filtering attribute

You can apply a row filtering attribute to a data entry form. The attribute will filter the rows that are displayed to the end user by the dimension in the page position, thereby limiting the user's view to relevant dimension values based on the defined attribute relation.

Before you select a row filtering attribute, arrange the dimension tiles in the form so that the base dimension for the attribute is the only dimension in the row (down) position, and the grouping or aggregate dimension is on the page edge. The list of attributes from which you can select will be limited to those that apply to the base and grouping dimensions.

**Note:** If you select an attribute and then change the dimension in the row position, the attribute will be removed. If you swap the dimension in the page position, the attribute will not apply.

## Example: Specifying display options for a data entry form

The following example shows the Data Entry Form Options dialog box.
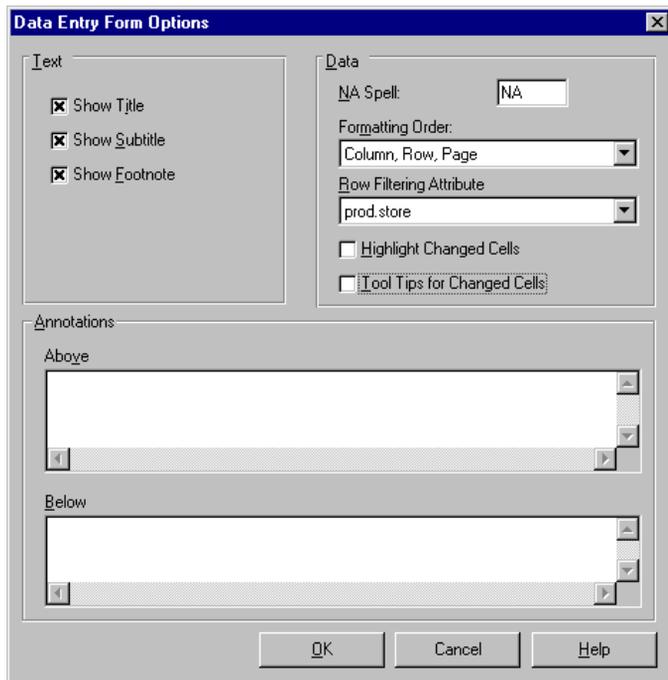


## Related information

For more information, search for the following topics the Financial Analyzer Help system:

"Applying an Attribute to a Data Entry Form"
"Including a Footnote in a Data Entry Form"
"Including a Subtitle in a Data Entry Form"
"Including a Title in a Data Entry Form"

# Associating Solve Definitions with Data Entry Forms

## About associating a solve definition with a data entry form

You can associate a solve definition with a financial data item in a data entry form. When a user submits data to the shared database, changes the page, or clicks the **Recalculate** button, the solve definition will calculate new data values.

The solve determines the minimum tree needed to recalculate the data. Therefore, calculations are limited to the data that is included in the form.

## Procedure: Associating a solve definition with a financial data item

To associate a solve definition with a financial data item in a data entry form, choose **Data Options** from the Data Entry Form menu and then choose **Calculations** from the submenu. This opens the Calculations dialog box, where you can select a financial data item and associate it with a solve.

**Note:** If the solve definition has a model, place the model definition in the row or column position. Recalculation will not occur if it is in the page position. If the solve has a hierarchy, you can place it any position.

## Example: Associating a solve definition with a financial data item

The following example shows the Calculations dialog box. In the example, the Actuals solve definition is associated with the Actuals financial data item.
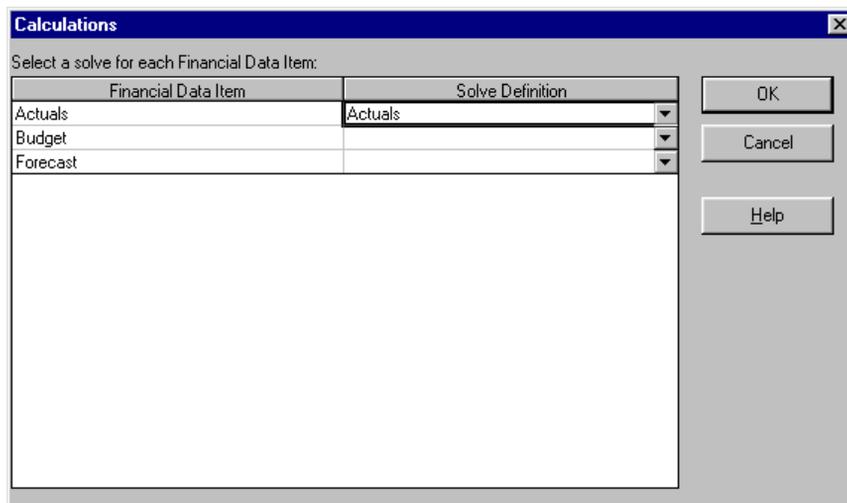


## Related information

For more information, search for the topic" Including a Solve Definition in a Data Entry Form" in the Financial Analyzer Help system.

# Specifying Numeric Formats for Financial Data Items in Data Entry Forms

## About specifying numeric formats for financial data items

You can specify numeric formats for financial data items in a data entry form. To do this, choose **Data Options** from the Data Entry Form menu and then choose **Number Format** from the submenu. This opens the Number Format dialog box, where you can select a financial data item and specify a format for representing positive, negative, and decimal numbers.

The number formats will be displayed when users open the data entry form in the Web interface.

## Example: Specifying numeric formats for financial data items

The following illustration shows the Number format dialog box. In this example, format information has been entered for three financial data items.
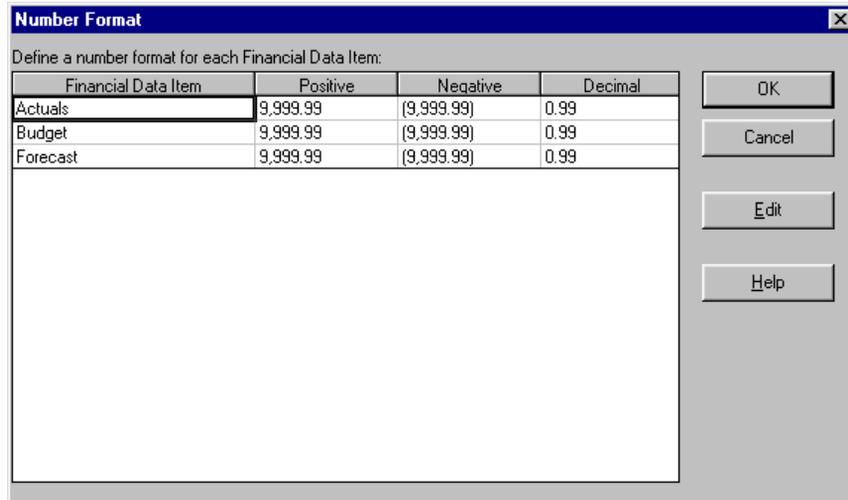


## Related information

For more information, search for the topic "Choosing a Format for Numbers in a Data Entry Form" in the Financial Analyzer Help system.

# Selecting Dimension Label Types for Data Entry Forms

## About dimension label types

You can select the type of labels that will display for dimensions in a data entry form. To do this, choose **Dimension Labels** from the Data Entry Form menu. This opens the Dimension Label Setup dialog box.

For each dimension, you can choose one of the following label types:

■ **Automatic** — The position of the dimension tile in the document determines the type of label that is displayed. If the dimension tile is on the row edge or on the page edge, the row label is displayed; if the dimension is on the column edge, the column label is displayed.

- **Description** — Displays the name of the dimension value description name.
- **Row label** — Displays the row label text for the dimension value.
- **Column label** — Displays the column label text for the dimension value.

## Example: Selecting label types for a data entry form

The following example shows the Dimension Label Setup dialog box.
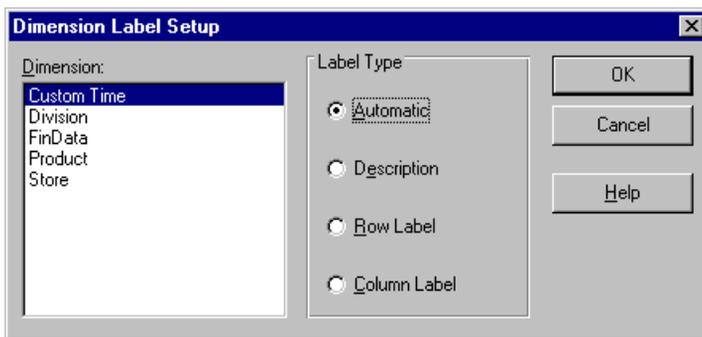


## Related information

For more information, search for the topic "Displaying Dimension Labels" in the Financial Analyzer Help system.

# Formatting Data Entry Forms

## What elements can you format?

You can apply colors and styles to data cells and labels in a data entry form. You can also apply colors and styles to the title, subtitle, and footnote.

You can specify the size of rows and columns in the data entry form. Note that row and column sizing is for viewing purposes only; size specifications will not apply when the data entry form is opened in the Web interface.

## Procedure: Applying colors and font styles to a data entry form

To apply colors and styles to a data entry form, follow these steps:

1. Select the element or elements that you want to format.

   ■ To select a row, click the row highlighter. Use CTRL+click or SHIFT+click to select multiple rows.

   ■ To select a column, click the column highlighter. Use CTRL+click or SHIFT+click to select multiple columns.

   ■ To select a label, click the label. Use CTRL+click or SHIFT+click to select multiple labels.

   ■ To select a text element (title, subtitle, or footnote), click the text. Use CTRL+click or SHIFT+click to select multiple text elements.

2. From the toolbar, choose

   

   or choose Choose **Font** from the Format menu.

   **Result:** The Font dialog box appears.

3. In the Font dialog box, select font color, font style (bold/italic), font size, and effects.

4. Choose **OK** to apply your selections.

## Specifying column width and row height in a data entry form

You can set column width and row height for a data entry form. Note that these settings are viewing purposes only; your settings will not display in the Web interface.

To set the width of a column in the data entry form, select the dimension label of the column to be adjusted and choose **Column Width** from the Format menu. This opens the Column Width dialog box, where you can type in a new value for the width.

To set the height of a row in the data entry form, select dimension label of the row to be adjusted and choose **Row Height** from the Format menu. This opens the Row Height dialog box, where you can type a new value for the height.

## Related information

For more information, search for the following topics in the Financial Analyzer Help system.

"Adjusting Column Width in Data Entry Forms"
"Adjusting Row Height in Data Entry Forms"
"Choosing Colors for Text and Numbers in Data Entry Forms"
"Choosing Fonts for Text or Numbers in Data Entry Forms"

# Including Asymmetric Formatting in Data Entry Forms

## About asymmetric formatting

You can combine the values of two dimensions, or the values of a dimension and a financial data item that are part of a data entry form to create an *asymmetric combination*. The asymmetric combination gives you access to all of the values of both dimensions and provides flexibility for positioning the values along the rows, columns, or pages of the form.

## Applying asymmetric formatting to a data entry form

To create an asymmetric data entry form, choose **Asymmetric Format** from the Data Entry Form menu. This opens the Create Asymmetric Combination dialog box, where you can set up the asymmetric combination.

You create an asymmetric data entry form the same way that you create an asymmetric report. Refer to he topic "Creating Asymmetric Reports" on page 13-7 for examples.

## Related information

For more information, search for the topic "Including Asymmetric Formatting in a Data Entry Form" in the Financial Analyzer Help system.

# Preventing Users From Overwriting Data in Data Entry Forms

### How to prevent users from overwriting data

Data that is entered into a data entry form and submitted to the shared database might overwrite existing data. You can prevent users from overwriting data to which they should not have access by locking data at the financial data item level. For example, you might want to lock cells that are associated with data from a previous time period.

When a user views the data entry form through the Web interface, locked cells will be displayed in gray.

### Using a write access profile to lock cells

To lock cells, you must define a write access profile that specifically denies user access to the data that is contained in these cells. Refer to the topic "Creating Write Access Profiles" on page 12-9 for information about denying write access. Also search for the topic "Write Access Profile" in the Financial Analyzer Help system.

# Saving Data Entry Forms

### About saving data entry forms

After you create a data entry form, you can save it in your personal database.

### Saving a new data entry form

When you save a new data entry form, you enter a unique name for the form. Optionally, you can enter one or more keywords that can be used to access the form in the Windows client environment. You also have the option to replace your default data entry form template with the current data entry form.

Choose **Save** or **Save As** from the File menu to save a new data entry form.

### Saving changes to a data entry form

When you save changes to an existing data entry form, you can overwrite the original form, or you can save the modified form under a new name and preserve the original.

Choose **Save** to overwrite the original form and **Save As** to save your changes as a new form with a unique name.

### Related information

For more information about saving data entry forms on an Administrator workstation, search for the following topics in the Financial Analyzer Help system:

"Saving a New Data Entry Form"
"Saving Changes to a Data Entry Form"

## Previewing Data Entry Forms

### Printing a data entry form

You can print a data entry form to preview its contents. Choose **Print** from the File menu to print the form.

Note that certain elements might not appear on the form when you print it. For example, if you have entered an annotation, the annotation text will not be displayed. Also, you cannot distinguish cells that have been locked from those that have not been locked. In order to see exactly how the form will appear to Web users, you must distribute the data entry form and view it in the Financial Analyzer Web interface.

### Viewing a data entry form in the Web interface

When you open the data entry form in the Financial Analyzer Web interface, you can see all parts of the form, including annotations and locked cells. If necessary, you might want to go back to the workstation and modify the form.

## Example: Data Entry form in the Web interface

The following illustration shows how a data entry form might appear in the Financial Analyzer Web interface.



## Related information

For information about working with data entry forms in the Web interface, see Chapter 20.

# Distributing Data Entry Forms

## About distributing data entry forms

You must distribute a data entry form to all users who will use the form to enter data. You can distribute data entry forms to any type of user: administrator, budget, analyst, or external.

## Distributing associated objects

When you distribute a data entry form, its dimension values, hierarchies, attributes, and model must also be explicitly distributed. If only a subset of the dimension values are distributed, then only that subset will appear when the form is viewed in the Web interface.

If the data entry form includes a solve definition, the solve is automatically distributed with the form. However, if the solve includes a model, you must also distribute the models or hierarchies associated with the solve.

If you have added the form to a folder, you must distribute the folder.

## Procedure: Distributing a data entry form

To distribute a data entry form, select **Distribution**, **Distribute Structures** from the Manage menu. Then choose **Data Entry Form** as the structure to distribute.

# Managing Data Entry Forms

## Modifying data entry forms

You can open a saved data entry form and modify the data selections, layout, calculations, and formats. You can also choose **Delete** from the File menu to delete the form, and **Rename** option from the File menu to rename the form. As you modify data entry forms, you distribute the modified versions to your users.

## Adding data entry forms to folders

You can organize data entry forms within folders so that users can locate them quickly and easily. Choose **Maintain Folders** from the Tools menu to add your data entry forms to one or more folders. Alternatively, you can open the data entry form, and choose **Add to Folder** from the File menu. You will be prompted to select a folder.

## Related information

For more information about managing data entry forms on an Administrator workstation, search for the following topics in the Financial Analyzer Help system:

"Opening a Data Entry Form"
"Closing a Data Entry Form"
"Deleting a Data Entry Form"
"Renaming a Data Entry Form"
"Adding the Current Data Entry Form to a Folder"
"Distributing Structures"

# 17

# Folders

## Chapter summary

This chapter describes folders and how to manage them.

## Who should read this chapter

You need to know the information in this chapter if you are an Analyst, Budget or
Administrator workstation user who will be using folders to manage documents.

## List of topics

This chapter includes the following topics:

- About Folders
- Managing Folders

# About Folders

## Definition: Folders

You can use folders to organize the documents that you create and save in your database. Folders:

- Are objects that you create and name expressly for the purpose of grouping your documents so that you can work with them more efficiently

- Enable you to organize documents logically, which means that you have complete control over the way in which your documents are arranged in each folder

For example, you might always want to print a certain group of documents together at the end of the month. You can group these documents together in a folder, so that you can print them together whenever you need to. You can also choose the order in which the documents in a folder are printed.

## Storing folders

Documents are stored independently from folders in the database. This means that if you delete a folder with documents in it, only the folder is deleted, not the documents that it contains. Note, however, that if you are an administrator and you distribute a folder, its contents are distributed along with the folder. You can also add documents to more than one folder, so that you have maximum flexibility in organizing your documents in the way that makes the most sense for you.

# Managing Folders

## Creating folders

You can create folders to help you organize your documents. When you create a folder it becomes part of your personal database. Only you can delete it.

## Adding documents to folders

You can add the document that you are currently working with to a folder. You are not required to open the document in order to add it to a folder. Any document in your database can be added to any folder in your database. You can also add a document to more than one folder.

## Viewing the contents of folders

You can see which documents are contained in your folders at any time.

## Printing documents from folders

You can group documents together in a folder so that you can print them together whenever you need to. You can also choose the order in which the documents are printed out. When you print documents from a folder, the documents you select are printed in the order in which they are listed in the Print Multiple dialog box.

## Renaming folders

You can change the name of any folder. When you change the name of the folder, you do not alter its contents.

## Deleting folders

When you no longer need a folder, you can delete it. Note that when you delete a folder, the contents of that folder are *not* deleted from your database.

## Related information

For more information about working with folders, search for the following topics in the Financial Analyzer Help system:

"Adding Documents to Folders"
"Adding Multiple Documents to Folders"
"Creating Folders."
"Deleting Folders"
"Printing Multiple Documents in One Session"
"Renaming Folders"
"Viewing Folders"

# 18

## The Financial Analyzer Web Interface

### Chapter summary

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

### List of topics

This chapter includes the following topics:

- Accessing Financial Analyzer through the Web Interface
- Financial Analyzer Page
- Document Workspace
- Navigation List
- Online Help
- Closing a Financial Analyzer Web Session

# Accessing Financial Analyzer through the Web Interface

## Description: Financial Analyzer Web interface

The Financial Analyzer Web interface provides access to reports, graphs, and data entry forms through a browser.

## System requirements

In addition to the standard Financial Analyzer server components, the following server components must be installed:

- Express Server, including Oracle Express Web Agent. The following configuration options must be selected in Express Configuration Manager:
  - The `WebAuthenticationType` property on the Web Agent tab must be set to `FORM`.
  - The `RequirePasswordEncryption` property on the Security tab must be set to `NO` and the `RequiredSecurityLevel` property must be set to `HOST` or `NONE`.
- A supported Web server such as Apache.

For more information, refer to Express Server and Express Web Agent documentation.

## Browser requirements

Users must have an appropriate browser installed on the PC. For information about browser requirements, refer to the release notes for Oracle Express Web Agent.

## User requirements

To access Financial Analyzer through the Web interface, you must have a valid user ID. You must also be set up as a user in Financial Analyzer.

## Methods of access

Financial Analyzer can be configured for direct access, or for access through Oracle Applications. Your Express system administrator will tell you which method to use and will provide the required URL and login information.

## Login tips

Following are some guidelines for logging in:

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

- Check that cookies are enabled for your browser. If you do not accept cookies, you cannot access the Financial Analyzer database.

- Ensure that Java and JavaScript are enabled for your browser.

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

- Bookmark your start page for easy access.

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

- If you will be using a language other than English, ensure that your browser is set to that language. The browser's language setting determines the language in which the application is displayed.

**Note:** Login sessions have a maximum idle time set by an Express system administrator for the Express Web Agent timeout parameter. A session will terminate automatically if it is idle for this time period.

# Financial Analyzer Page

## Description: Financial Analyzer page

The Financial Analyzer page appears when you access Oracle Financial Analyzer through a browser. The Financial Analyzer page is comprised of two frames: the navigation list in the left frame and the document workspace in the right frame.

## Example: Financial Analyzer page

The following illustration shows the Financial Analyzer page.

# Navigation List

## Description: Navigation list

The navigation list, located in the left frame of the Financial Analyzer page, enables you to work with Financial Analyzer *objects* such as reports, graphs, data entry forms, folders, and saved selections that have been distributed to you. If you are an analyst user, you can also use the navigation list to create, save, and view personal reports, graphs, folders, and saved selections.

## Example: Navigation list

The following illustration shows how the Financial Analyzer navigation list might appear to an analyst user. The Navigation toolbar is at the top; Financial Analyzer objects populate the list.
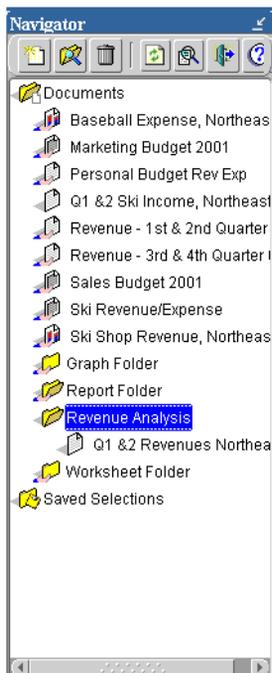
## Navigation tools

The Navigation 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 report, graph, folder, or saved selection.<br>**Note:** Only analyst users have access to this command. |
| | **Find** | Search for documents and saved selections by name. |
| | **Delete** | Delete a personal report, graph, folder, or saved selection.<br>**Note:** Only analyst users have access to this command. |
| | **Refresh View** | Refresh your view of the shared database. If there are pending data submission tasks, you will be warned that the associated data will not be visible until these tasks have been processed. |
| | **View Pending Updates** | View information about pending submission tasks. |
| | **Exit** | Exit Financial Analyzer. |
| | **Help** | Access Financial Analyzer HTML Help. |

## Navigation list icons

The icons that appear in the navigation list depend on your user privileges and the objects that have been distributed to you. The following table illustrates 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 |
|---|---|---|
|  | Main Documents folder; contains documents and document folders | New Report<br>New Graph<br>Paste<br>New Folder<br>Find Documents<br><br>**Note:** Only analyst users can create new reports, graphs, and folders and use the Paste command. |
|  | Public (shared) documents folder | Find Documents<br>Properties |
|  | Report that has been distributed to you | Open<br>Print<br>Properties |
|  | Graph that has been distributed to you | Open<br>Print<br>Properties |
|  | Data entry form that has been distributed to you | Open<br>Print<br>Properties |
|  | User-defined folder<br><br>**Note:** Only analyst users see this object. | Rename<br>Delete<br>Paste<br>Find Documents<br>Properties |

| Object | Description | Right-click Commands |
|---|---|---|
| | User-defined report<br><br>**Note:** Only analyst users see this object. | Open<br>Rename<br>Delete<br>Print<br>Cut<br>Copy<br>Submit documents<br>Properties |
| | User-defined graph<br><br>**Note:** Only analyst users see this object. | Open<br>Rename<br>Delete<br>Print<br>Cut<br>Copy<br>Paste<br>Properties |
| | System folder for saved selections | New Saved Selection<br>Find<br><br>**Note:** Only analyst users can define new saved selections. |
| | System folder for saved selections within a dimension | New Saved Selection<br>Find<br><br>**Note:** Only analyst users can define new saved selections. |
| | Saved selection that has been distributed to you | View<br>Properties |
| | User-defined saved selection<br><br>**Note:** Only analyst users see this object. | Edit<br>Rename<br>Delete<br>Properties |

# Document Workspace

## Description: Document workspace

When you open or create a document, the document is displayed in the document workspace. You can work with the following types of Financial Analyzer documents:

- Reports — Display data in tabular format. For information about working with reports in the Web environment, see Chapter 19.

- Graphs — Display data in graphical format. For information about working with graphs in the Web environment, see Chapter 19.

- Data Entry forms — Enable users to enter data and submit the data to the shared database. For information about working with data entry forms in the Web environment, see Chapter 20.

## Adjusting the document workspace for reports and graphs

By default, when you open a report or graph, the document appears in the right frame of the workspace, while the navigation list appears in the left frame.

You can adjust the size of the document workspace for an open report or graph as follows:

- Use the minimize button at the top of the navigation list to minimize the navigation list.

  

  The current document expands to full screen size and overlays the navigation list.

- Use the restore button at the top of the navigation list to restore the navigation list.

  

  The current document returns to its default size.

## Example: Document in expanded workspace

The following example illustrates a sample report as it would appear after the document workspace has been enlarged. Note how the document overlays the navigation list. This contrasts with the default display shown in "Example: Financial Analyzer page" on page 18-4.



## Data entry forms always display in an expanded workspace

A data entry form always occupies the entire document workspace. You must close the form in order to access the navigation list.

# Online Help

## Accessing help

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

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

## 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.

# Closing a Financial Analyzer Web Session

## Procedure: Closing a Web session

To close Financial Analyzer, click the **Close** button on the Navigation toolbar.

Alternatively, you can click the Windows close button (X), located in the upper right corner of the screen. This closes the browser as well as the application.

## What happens when you close Financial Analyzer?

Exiting terminates the application immediately. If you are an analyst user and you have modified an open document, you will be prompted to save the document.

# 19

# Working with Web Reports and Graphs

## Chapter summary

This chapter describes how to work with Financial Analyzer reports and graphs in the Web environment.

## List of topics

This chapter includes the following topics:

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

# About Web Reports and Graphs

## Description: Web reports

Web reports display multi-dimensional data in tabular format. You can open and work with reports that have been distributed to you by your administrator. If you are an analyst user, you can also create and save personal reports.

## Example: Web report

The following illustration shows a sample Web report.

## Description: Web graphs

Web graphs display multi-dimensional data in graphical format. You can open and work with graphs that have been distributed to you by your administrator. If you are an analyst user, you can also create and save personal graphs.

## Types of graphs

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

| Graph Type | Graph Subtypes | Description |
| --- | --- | --- |
| Bar | Clustered<br>Clustered Dual-Y<br>Stacked | Compares data associated with different dimension values |
| Line | Absolute<br>Absolute Dual-Y<br>Stacked<br>Stacked Dual-Y<br>Percentage | Shows trends over time and emphasizes rates of change |
| Area | Absolute<br>Stacked<br>Percentage | Shows trends and emphasizes the degrees 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 financial data items |

## Example: Web graph

The following illustration shows a sample Web graph.
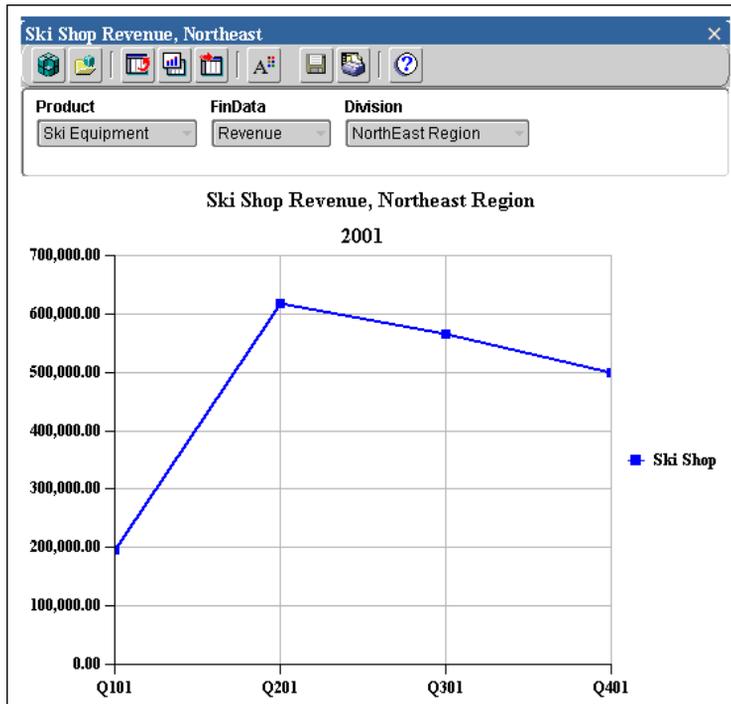


## Opening a report or graph

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.

**Note:** To search for a report or graph, right-click the main Documents folder or a specific document folder, choose **Find Documents**, and enter a name or name fragment.

## Using the Document toolbar to work with reports and graphs

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

| Button | Name | Function |
|--------|------|----------|
| | **Select Data** | Select values from a list and access various data selection tools. Also sort selections. |
| | **Apply Saved Selection** | Replace the current values in the document with a saved selection of values. |
| | **Change Layout** | Change the layout of the report or graph.<br>**Note:** Asymmetric reports that join a financial data item and a dimension do not support this function. |
| | **Change Document Type** | Change a report to a graph or a graph to a report. For a graph, you can also choose the graph type.<br>**Note:** Asymmetric reports that join a financial data item and a dimension do not support this function. |
| | **Export** | Export data and labels from the report or graph to a comma delimited (.csv), tab delimited (.txt), or Excel 2000+ (*.htm) file. |
| | **Format Document** | Specify document formatting. |
| | **Color Coding** | For a report, define and apply color formats based on data conditions. |
| | **Ranking/ Exception Reports** | For a report, limit the display to rows that meet user-specified criteria for exception, ranking, or exception then ranking. |

| Button | Name | Function |
|--------|------|----------|
|  | **Save As** | Save the report or graph.<br>**Note:** Only analyst users have access to this command. |
|  | **Copy to Clipboard** | Copy selected data from a report to the Windows clipboard. |
|  | **Print** | Print the report or graph. |
|  | **Help** | Display Financial 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 are an analyst user, and you have modified the report or graph, you will be prompted to specify whether you want to save the document.

# Creating Web Reports and Graphs

## Who can create reports and graphs?

If you are an analyst user, you can create personal reports and graphs.

### 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. The title "Untitled Report" or "Untitled Graph" appears on the document's title bar.

## Selecting Data for Web Reports and Graphs

### About selecting data

You specify the slice of data that you want to include in a report or graph. In the context of a report or graph, a data slice is defined by one or more financial data items and a set of dimension values.

Whether data selections persist beyond your current working session depends on the type of user that you are set up to be.

- If you are an analyst user and save the report or graph, the data selections are saved with the document.

- If you are not an analyst user, you can select data while the report or graph is open in the workspace, but your selections will not be retained when you close the document.

### Data selection tools and techniques

Use the **Select Data** button on the Document toolbar to open the Select Data dialog box where you can choose a dimension and access tools that enable you to choose

values from a list, select data by criteria, order your selections, and apply a saved selection of values.



## Data Selection toolbar

The Data Selection toolbar appears at the top of the Select Data dialog box. The toolbar buttons enable you to perform the following tasks.

| Button | Description | Function |
|--------|-------------|----------|
|  | **Save Current Selection** | Save selected values as a custom saved selection. <br> **Note:** Only analyst users have access to this command. |
|  | **Choose Values by Family** | Select values based on a family relationship. |
|  | **Choose Values by Attribute** | Select values that share an attribute. |
|  | **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 data values for a financial data item compare with a value or range of values. |
|  | **Choose Values Meeting Financial Data Item Condition** | Select values based on the way in which data values in one financial data item compare with data values in another financial data item. |

| Button | Description | Function |
|--------|-------------|----------|
| | **Choose Top/ Bottom Values** | Select the largest and smallest values for a financial data item. |
| | **Sort** | Sort selected values. |

## Example: Selecting data

The following illustration shows the Select Data dialog box. In the example, the user has selected four values in the Custom Time dimension.
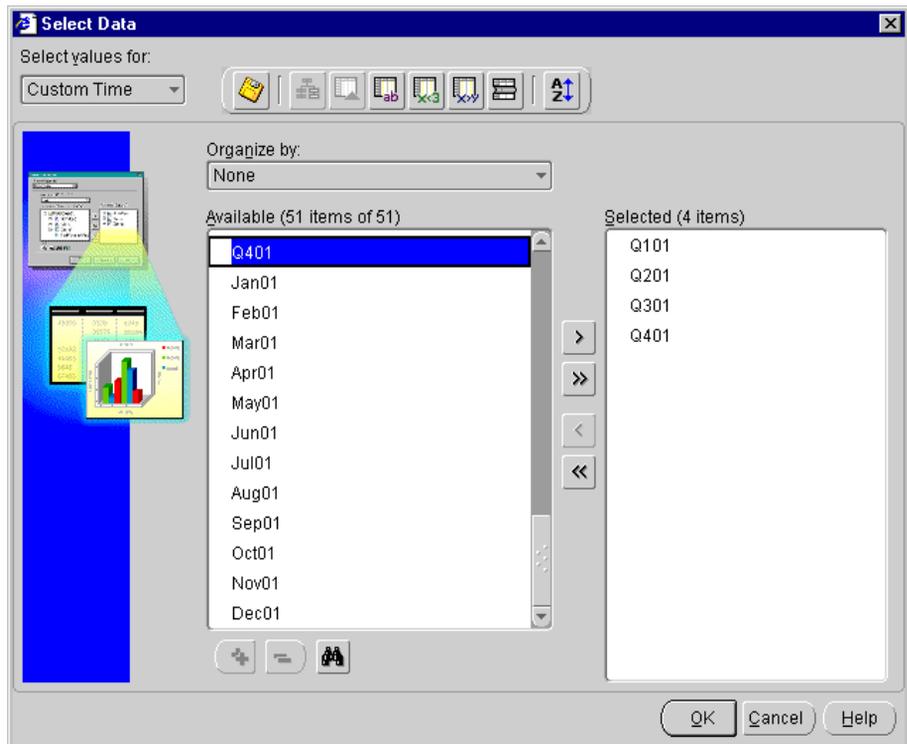
## Sorting selections

Once you have selected dimension values, you can arrange them in the Selected box in the order in which you want them to appear. 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 a right-click function to change the relative position of a value or values

### Procedure: 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 whether a hierarchy is in use, 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 financial data item and the qualifying dimension values for that financial data item. 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**.
   - **depth** — Sorts values by depth of hierarchical relationship. You can choose **top to bottom** or **bottom to top**.

3. You can choose the **Preview** button to preview the results of the sort.

4. Choose **OK**.

### Procedure: Using drag and drop to order values

To use drag and drop to order values in the Selected box, click one or more values and drag them to a new location. 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 values

To use a right-click function to order values in the Selected box, follow these steps:

**1.** Right-click the value whose position you want to change.

**Result:** A popup menu appears, listing options for changing the position of the value. 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 selected value first in the list, choose **Move to top**.

- To place the selected value last in the list, choose **Move to bottom**.

- To place the selected value 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.

## Shortcut: Defining saved selections

If you are an analyst user, you can save selections 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.

You can define a saved selection so that it will be automatically updated as data is added to or removed from the database. For example, you might define a saved selection that selects all products that are children of a specific parent. As your administrator adds new products and distributes structures, the new products will automatically be added to your saved selection.

You can define a saved selection directly from the navigation list, or you can define it on-the-fly as you select data for a report or graph.

### Procedure: Defining a saved selection from the navigation list

To define a saved selection from the navigation list, follow these steps:

**1.** On the Navigation 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 menu.

**Result:** The New Saved Selection dialog box appears. If you clicked the Saved Selections folder, the New Saved Selections dialog box displays a default dimension, which you can change. If you clicked 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. The Dimension box displays a default dimension. If this is not the dimension for which you want to create the saved selection, select an alternate dimension.

4. Click the **Selector** button.



**Result:** The Select Data dialog box appears.

5. Choose 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.

6. When your value selections are complete, choose **OK**.

    **Result:** The New Saved Selection dialog box displays. The Selections box displays the values that you chose.

7. Specify how you want the values to be saved:

    - **Save steps** — Saves the steps that you followed to select the values. Use this option 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.

    - **Save members** — Saves the actual dimension values. Use this option when you want to examine data for the same dimension values on an ongoing basis.

    **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.

8. In the Description box, you can enter optional text to identify the saved selection.

9. If a report or graph that includes the dimension for the saved selection is open in the workspace, you can apply your saved selection directly to the document. To apply the saved selection to the document, check the **Apply to Open Report** or **Apply to Open Graph** box.

10. Choose **OK** to save the selection.

### Procedure: Saving a selection from within a document

To save a selection of values as you are selecting data for 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. Select the values that will comprise the saved selection.

   You can select individual 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.

4. When your selections are complete, 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 that describes the saved selection.

   c. Specify how you want the values to be saved:

      * **Save steps** — Saves the steps that you followed to select the values. Use this option 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.

      * **Save members** — Saves the actual dimension values. Use this option when you want to examine data for the same dimension values on an ongoing basis.

   **Note:** If you used the drag and drop method or a right-click function to sort values for the selection, you will not be able to save steps.

6. Choose **OK** to save the selection.

**Example: Saved selection definition**

The following illustration shows the New Saved Selection dialog box. In this example, the user defines a saved selection from the navigation list. The Apply to Open Report box indicates that a document is open in the workspace.



## Applying saved selections to reports and graphs

You can apply a saved selection to an open report or graph. Applying a saved selection replaces all of the values for the dimension with the values in the saved selection. You can apply any saved selection that has been distributed to you. If you are an analyst user, you can also apply a personal saved selection.

## Methods for applying saved selections to reports and graphs

You can use the following methods to apply a saved selection to a report or graph:

- You can select a saved selection in the navigation list and use a right-click command to apply it to the open document. The document must include the dimension for the saved selection.

- You can use the **Apply Saved Selection** tool in the Select Data dialog box and choose a saved selection to apply.

- As you define or edit a saved selection, you can apply it to the open document if the document includes the dimension for the saved selection. This option is only available if you are an analyst user.

## Procedure: Using a right-click command to apply a saved selection to a report or graph

To use a right-click command to apply a 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 that you want to apply. From the popup menu, choose **Apply to Open Report** or **Apply to Open Graph**.

   **Result:** The saved selection replaces the current 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 a report or graph

To apply a new or modified saved selection of values to an open report or graph, click **Apply to Open Report** or **Apply to Open Graph** in the New Saved Selection or Edit Saved Selection dialog box as you define the selection. When you choose **OK**, Financial Analyzer will save the selection and apply it to the document.

# Arranging and Viewing Data in Web 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 various ways.

Whether layout selections persist beyond your current working session depends on the type of user that you are set up to be.

- If you are an analyst user and save the report or graph, the layout is saved with the document.

- If you are not an analyst user, you can change the layout while the report or graph is open in the workspace, but the layout will not be retained when you close the document.

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

With the document 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

In a report, you can use the row, column, and page selectors to drag and drop dimensions to new positions. 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 position, the dimension moves with the selector.

Following 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 on the page edge.

## Drilling through levels of data in a report or graph

If a dimension is organized by a hierarchy, you can view data at various levels of aggregation in a report or graph by drilling within aggregate dimension 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 sweep 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 20-3.

## 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 View Type** button on the Document toolbar.



This opens the Change View Type 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 View Type** button on the Document toolbar.



This opens the Change View Type dialog box, where you can select an alternate graph type. For information about graph types, see "Types of graphs" on page 19-3.

## 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 that the one that is currently in view. For example, the current page might show data for Total Product, but you can select another product 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, as described in the topic "Procedure: Setting the size for rows and columns in a report" on page 20-9.

## 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.



## 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 revenue, you would specify Geography as the row dimension.

### Identify the financial data item and the qualifying dimension values

Also identify the financial data item that you want to use as the basis for evaluating the dimension values in the row position and set this as the financial data item 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 Revenue, Expense, Net Income, or another financial data item? You should also identify the qualifying dimension values that you intend to apply to the financial data item. To continue with the previous example: for what time period do you want to look at the financial data item?

By default, Financial Analyzer will attempt to use the first financial data item that is displayed in the base report as the financial data item for exception and ranking. You can change this selection, but before you do so, ensure that the report includes the financial data item 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 Revenue, but displays data for Expense.

## Working with Ranking/Exception reports

You can work with a Ranking/Exception report, just as you would any Financial 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 page through 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 vary.

- 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 19-33.

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 financial data item on which to base the exception, specify cutoff values, and select qualifying dimension values. Proceed as follows:

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

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

    The operators that you can choose depend on the type of financial data item (numeric or text). For example, if you select a numeric financial data item, 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 financial data item 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 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 19-33.

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 financial data item on which to base the ranking, specify ranking criteria, and select qualifying dimension values. Proceed as follows:

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

   b. To rank top values, 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**.

   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 report.

## Example: Ranking criteria

The following example shows the dialog box for defining ranking criteria.
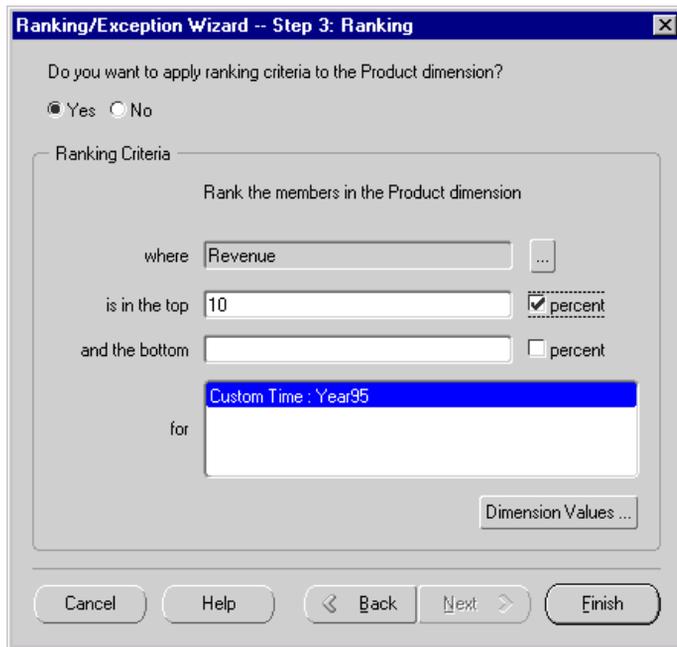


## Procedure: Creating a report that meets exception and ranking criteria

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 "Procedure: Modifying exception and ranking criteria for a report" on page 19-33.

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 financial data item on which to base the exception, specify cutoff values, and select qualifying dimension values. Proceed as follows:

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

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

      The operators that you can choose depend on the type of financial data item (numeric or text). For example, if you select a numeric financial data item, 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 financial data item 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 financial data item on which to base the ranking, specify ranking criteria, and select qualifying dimension values. Proceed as follows:

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

    **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 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 (financial data item, 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 19-25.

    **Note:** If you do not want to define, disable, or modify exception criteria, proceed to Step 4.

4.  To define, disable, or modify ranking criteria, choose the **Ranking** tab or click **Next**.

    **Note:** 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 19-28.

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 financial data item meet criteria that you specify.

For information about report format options, see Chapter 20.

### 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 20.

# Printing Web Reports and Graphs

### About printing reports and graphs

You can print a report or graph and specify settings that determine how the printed pages will look. If you are an analyst user and save the document, Financial Analyzer will save the print settings for order, scaling, and page setup.

You can also print one or more reports, graphs, and forecasts directly from the navigation list.

### 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 Financial 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, 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 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 fit completely within 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 Web Reports and Graphs

## Who can save reports and graphs?

If you are an analyst user, you can save a report or graph that you have created. You can also save a report or graph that has been distributed to you by your administrator by giving it a new name.

Saving a report or graph saves the view with the current financial data items 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 will appear in the main Documents folder in the navigation list.

- You can save the document in a folder that you have previously created. The saved report or graph will appear in the specified folder in the navigation list. For information about folders, see "Using Folders to Manage Web Reports and Graphs" on page 19-44.

- You can save the document as the default for that document type. When you create a new document that is based on the default, the report or graph will have the dimension values, layout, and other characteristics of the default.

## 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.

   **Result:** The Save As dialog box appears. If you are saving a new document, the default name of the document, such as "Untitled Report" or "Untitled Graph," appears in the Save Document As box. If you are saving modifications to an existing document, its current name appears in the Save Document As box.

2. Specify the name for the document that you are saving, as follows:

   - If you are saving a new document, type a name 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.

   - 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:** If you want to save the report in the main Documents folder, select **None** in the Into Folder box.

4.  If you want to save the current document as your default document, so that its structure will appear whenever you create a new document of that type, select the **Save As Default** option.

5.  Choose **OK.**

# Copying Data from Web Reports

## About copying data

You can copy data in contiguous cells from a report to the Windows clipboard. You can choose to copy data that has not been rounded and has been stripped of special formats such as thousands separators, currency signs, and percent symbols or you can copy rounded data that includes these elements. You can also copy row and column labels.

## Procedure: Copying data from a report

To copy data from a report, follows 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 and select a copy option from the popup menu.

3. Choose a copy option:

- **Copy** — Copies data that is not rounded and 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 data that is not rounded and excludes formats such as thousands separators, currency signs, and percent symbols. Also copies row and column labels.

  * **Copy Number Formatted Data** — Copies data that is rounded and includes formats such as thousands separators, currency signs, and percent symbols.

  * **Copy Number Formatted Data with Labels** — Copies data that is rounded and includes formats such as thousands separators, currency signs, and percent symbols. Also copies the labels.

  * **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 Web Reports and Graphs

## About exporting data from reports and graphs

You can export data from Web 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 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 data.

## Procedure: Exporting data from a report or graph

To export data from a report or graph, 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.  In the Export box, 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.

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 number formatting. Do not check this option if you want to export unformatted data. Note that an HTM export always 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 Financial 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.

- **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 19-43.

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.

   **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.

## Example: Exporting data

The following example shows the Export dialog box. The user has selected Excel 2000+ (*.htm) as the export file type.

```
Export                                    [X]

┌─ Export ──────────────────────────────────┐
│  ○ Current Page                            │
│  ● All 3 Pages                             │
└────────────────────────────────────────────┘

As Type:
┌────────────────────────────────────────────┐
│ Excel 2000+ (*.htm)                      ▼ │
└────────────────────────────────────────────┘

┌─ Options ─────────────────────────────────┐
│  ☑ Include Number Formatting               │
│  ☐ Repeat Group Labels                     │
│  ☐ Include Title, Subtitle, Footnote       │
│  ☑ Create One Sheet per Page               │
└────────────────────────────────────────────┘



              (  OK  )  ( Cancel )  ( Help )
```
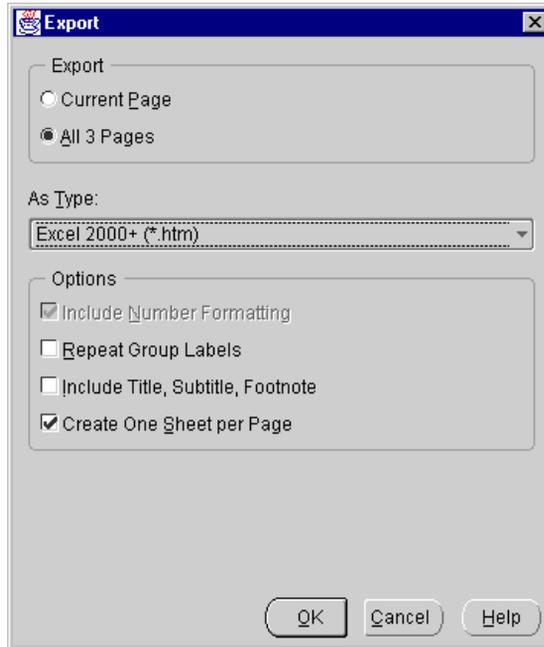
## About Excel 2000+ output files

When you export to a single worksheet in Excel 2000+ (*.htm) format, Financial 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, Financial 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.

# Using Folders to Manage Web Reports and Graphs

## Folders organize personal documents for analyst users

If you are an analyst user, you can create personal folders to organize the reports and graphs that you create. You can populate a folder with saved documents. You can also add documents to a folder, delete documents from a folder, and copy and move documents between folders.

## Procedure: Creating a folder

To create a new folder, follow these steps:

1. On the Navigation 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**.

   **Result:** The new folder is displayed as a personal object in the navigation list.

## Adding a document to a folder

When you save a personal report or graph, you have the option to add it to a folder that you have previously created.

For a Web report or graph, you specify the folder in the Save As dialog box, as shown following.
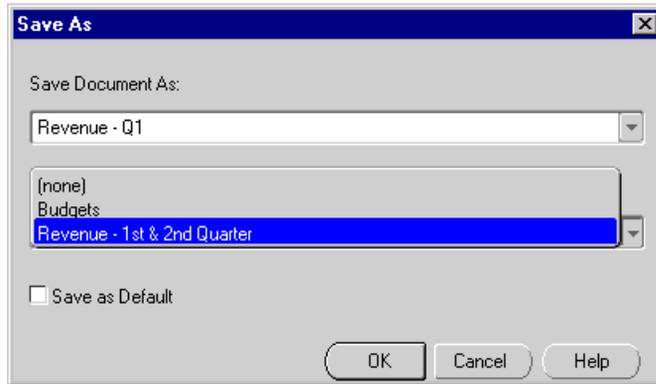


If you choose **(none)**, the document will be saved in the main Documents folder.

## Moving or copying documents between folders

If you are an analyst user, you can move a personal report or graph from one personal folder to another personal folder or to the main Documents folder. You can also copy a report or graph to another folder.

### Selecting documents to move or copy

Select documents to move or copy as follows:

- To select a single document, click the document.

- To select multiple nonsequential documents, press and hold the CTRL key and click each document.

- To select multiple sequential documents, click the first document, press and hold the SHIFT key, and then click the last document.

### Moving reports and graphs

You can use the following methods to change the position of personal reports and graphs in the navigation list:

- Drag and drop — Click the selection, drag it to the new location, and release the mouse.

- Popup menu commands — Right-click the selection, choose **Cut**, click the new location, and then choose **Paste**.

- Keyboard shortcuts — Highlight the selection, press CTRL+x, navigate to the new location, and press CTRL+v.

### Copying reports and graphs

You can use the following methods to copy reports and graphs in the navigation list:

- Drag and drop — Press the CTRL key and click the selection, drag it to the new location and release the mouse.

- Popup menu commands — Right-click the selection, choose **Copy**, navigate to the new location, and choose **Paste**.

- Keyboard shortcuts — Highlight the selection, press CTRL+c, navigate to the new location, and press CTRL+v.

## Removing a document from a folder

If you are an analyst user, you can remove a personal document from a folder in the navigation list.

To remove a document from a folder, open the folder, select the document, and click the **Delete** button on the Navigation toolbar.

Alternatively, you can right-click the document and choose **Delete** from the popup menu.

In either case, the system will prompt you to confirm the deletion.

**Result:** The document is removed from the specified folder. If there is a copy of the document in another folder, it is not removed.

## Changing the order of documents in a folder

If you are an analyst user, you can change the current order of personal documents in a 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 cursor, 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

# Working with Reports and Graphs in the Navigation List

## Navigation list functions for reports and graphs

You use the navigation list to open reports and graphs. If you are an analyst user, you can also use the navigation list to create and maintain personal reports, graphs, and folders.

In addition, you can work with reports and graphs in the navigation list as follows:

■  Search for a report or graph

■  Rename a personal report or graph (analyst user only)

■  Apply a saved selection to an open document.

■  Print one or more documents.

■  View the object properties of a document.

■  Delete one or more personal documents (analyst user only)

## 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 document is in more than one folder, it will be renamed in all folders.

## Applying a saved selection to a report or graph

When a report or graph is open in the workspace, you can choose a saved selection in the navigation list and apply it directly to the document. For information about applying a saved selection, see "Procedure: Using a right-click command to apply a saved selection to a report or graph" on page 19-16.

## Printing one or more reports and graphs

### About printing multiple documents

You can select multiple reports, graphs, and data entry forms in the navigation list and print them using a single command. 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. When you print multiple documents, Financial Analyzer prints all pages of the selected documents.

### Procedure: Printing multiple documents

To print one or more saved 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: Viewing the properties of a report or graph

To view the properties for a report or graph, right-click the document in the navigation list and choose **Properties** from the popup menu.

The following information appears:

-   Name
-   Created
-   Modified
-   Class
-   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 Navigation 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 multiple documents

To delete more than one personal document, follow these steps:

1.  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.

2.  Repeat the previous procedure for each personal document that you want to delete.

3.  After you make your final selection, right-click and choose **Delete** from the popup menu.

    **Result:** You will be prompted to confirm the deletion.

# 20

## Formatting Web Reports and Graphs

### Chapter summary

This chapter describes how to you can format Financial Analyzer reports and graphs in the Web environment.

### List of topics

This chapter includes the following topics:

- Formatting Web Reports
- Formatting Elements for an Entire Report
- Formatting Selected Rows and Columns in Reports
- Clearing Row and Column Formats
- Formatting Reports Based on Data Conditions (Color Coding)
- Formatting Web Graphs

# Formatting Web Reports

## About formatting Web reports

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 dimensions, set formats for numeric 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, columns, and labels in the report. For example, you can apply fonts, colors, and borders to the data in selected rows and columns.

- Color Coding — You can create conditional format rules that will apply to a report when the data values for a financial data item meet specified criteria. This is referred to as *color coding*.

## Persistence of report formats

Whether report formats persist beyond your current working session depends on the type of user that you are set up to be.

- If you are an analyst user and save the report, formats are saved with the document.

- If you are not an analyst user, you can apply formats while the report is open in the workspace, but your settings will not be retained when you close the document.

# Formatting Elements for an Entire Report

## What elements can you format?

The following format selections apply to the entire report:

- General — Specifies parameters for displaying indented levels, horizontal and vertical gridlines, and rows that contain NA (unavailable) and zero data. Also specifies how to handle formatting precedence 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. In the General tab, choose one or more display options as follows:

   - **View Rows** — Specify whether to show all rows or suppress rows with zero values, NA (unavailable) values, or both NA and zero values.

   - **Formatting Precedence (low to high)** — Select the precedence in which formatting characteristics will be applied to cells when conflicts occur.

   - **NA Spell** — Enter a character or character string to represent unavailable data (up to 31 characters).

   - **Indent by Level** — For dimensions that have a hierarchical structure, specify whether to indent rows by level and select 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 to the report.

## Example: Specifying general display elements for a report

The following illustration shows the Format Document dialog box for reports. The General tab is active.
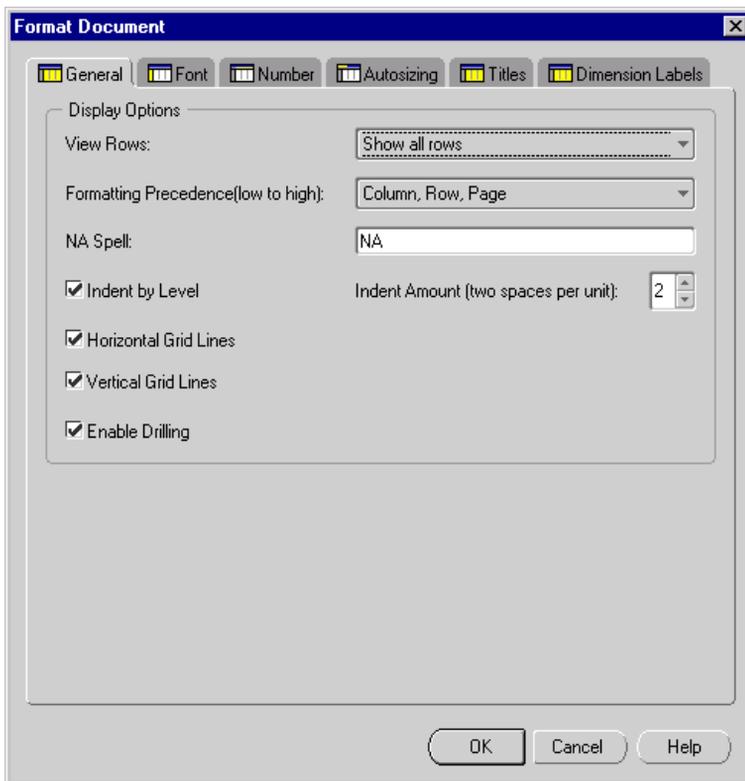
## Procedure: Specifying fonts and colors for a report

To specify 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 tab displays the current settings for font name, font size, color, and alignment. You can change one or more 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 cell background.

   - In the Alignment box, select an alignment option for data values.

5. Click **OK** to apply your selections to the report.

   **Note:** Font settings will be applied to both the data *and* the labels. Color and alignment settings will be applied only to the data.

## Example: Specifying fonts and colors for a report

The following illustration shows the Format Document dialog box for reports. The Font tab is active.
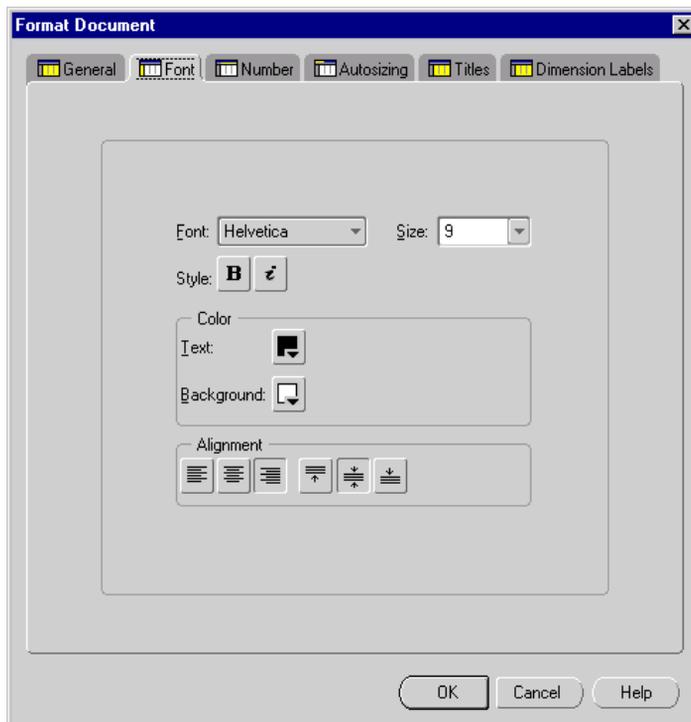
## Procedure: Specifying numeric formats for a report

To specify formats for numerical values in 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 **Number** tab.

4. The Number tab displays the current settings for numeric values. You can modify the following settings:

| Option | Description |
|---|---|
| Number of Decimal Digits | Number of decimal places |
| Positive Values | Format for positive numbers<br>(Available if you do not choose the Currency/Percent option) |
| Negative Values | Format for negative numbers<br>(Available if you do not choose the Currency/Percent option) |
| Scale Values Down By | Scaling for large numbers |
| Thousands Separator | Display the thousands separator |
| Leading Zero | Display leading zeros |
| Currency/Percent Formatting | Activates currency/percent format options:<br>■ Symbol — Symbol for dollars, yen, pounds, francs, or percent<br>■ Positive Values — Format for positive values<br>■ 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.

5. Click **OK** to apply your selections to the report.

## Example: Specifying numeric formats for a report

The following illustration shows the Format Document dialog box for reports. The Number tab is active.
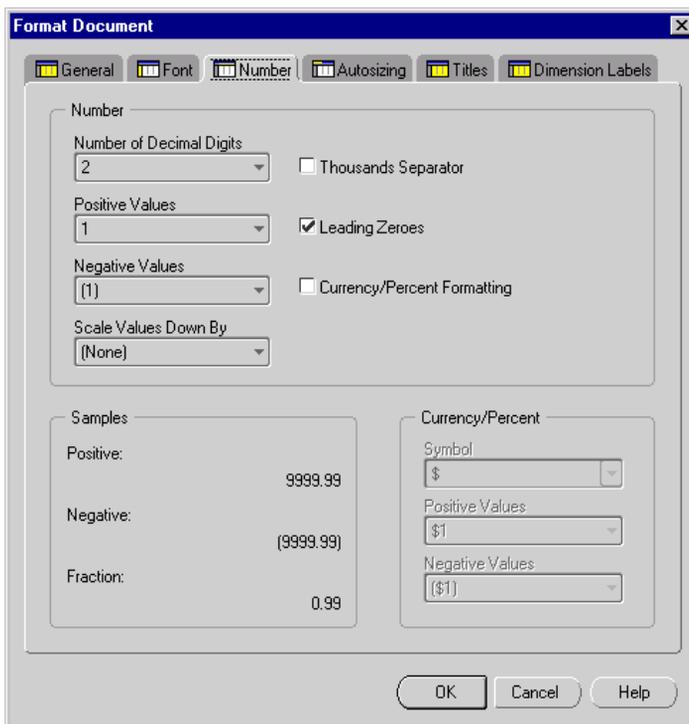
## Procedure: Setting the size for rows and columns in a report

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 General tab is active.

3. Select the **Autosizing** tab.

4. The Row Sizing box displays the current setting for row sizing. You can make an alternate selection as follows:

   - **Autosizing by Label** — Automatically sizes the rows based on the height and width of the row labels.

   - **Equal Sizing** — Size 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 make an alternate selection as follows:

   - **Autosizing** — Automatically sizes the columns on the current page based on your selection. You can choose one of the following options:

     * **by Label** — Size the columns according to the size of the individual column labels.

     * **by Data** — Size the columns according to the size of the data each column contains.

     * **by Largest Data or Label** — Size 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.
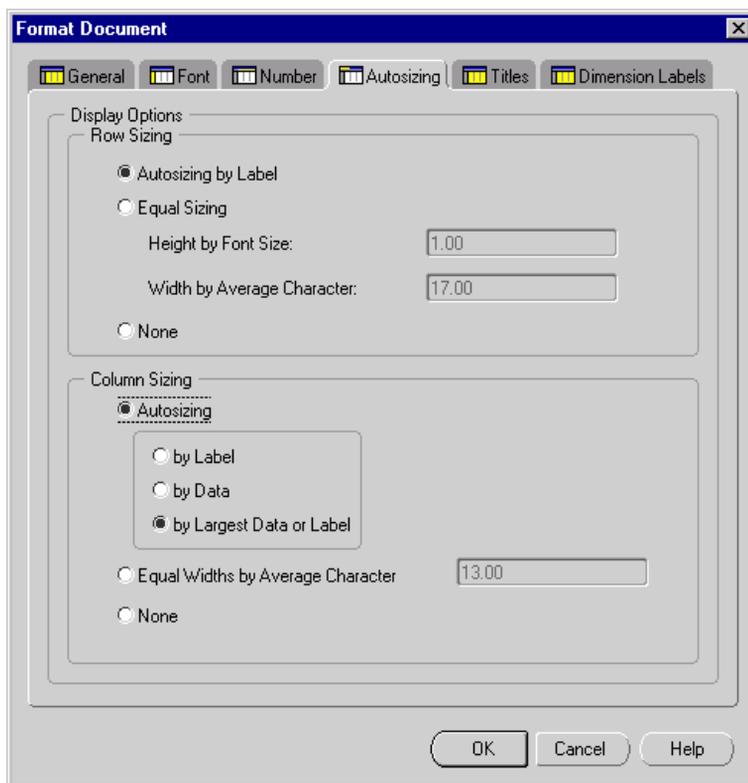


## Alternative: Manually adjusting rows or column size

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 Autosizing 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

If an Autosizing 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 or None is the current option for row and column sizing, the options for reapplying autosizing will not appear when you right-click. If Equal or None is the current option for rows but not for columns (or for columns but not for rows), 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 the font name, size, color, style, and background color for the text.

    b. In the Alignment box, select an alignment option for the text.

    c. In the Display Options box, choose **Show** to display the specified text element in the current document.

    d. In the Text box, type 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 Title tab is active.
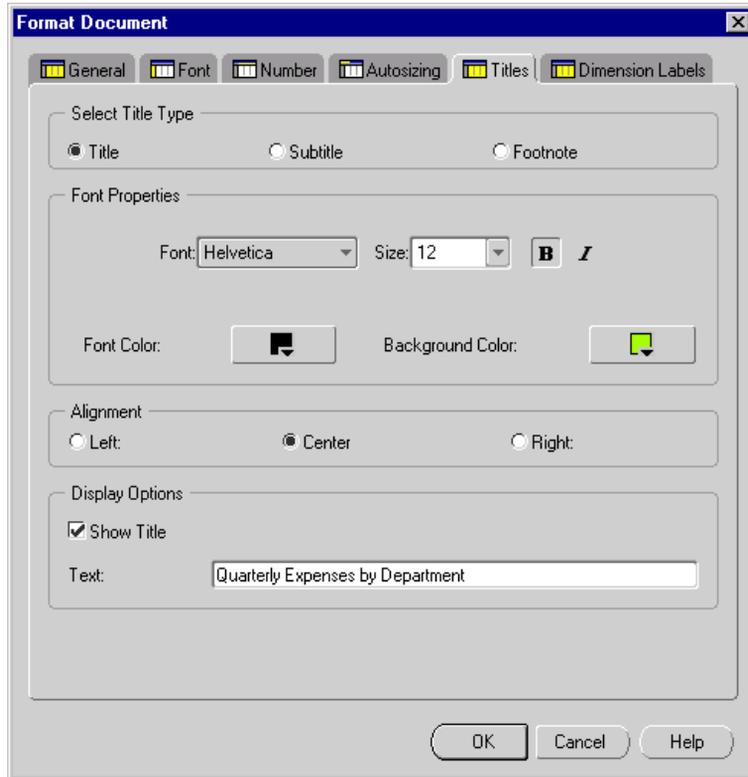
## Procedure: Selecting dimension label types for a report

To specify 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.

   A

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 the **Labels** column for the dimension and choose 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 edge or on the page edge, the medium name (row label) is displayed; if the dimension is on the column edge, the short name (column label) is displayed; if the dimension is on the page edge, the row label is displayed.

   - **Long** — Displays the dimension value description name.

   - **Short** — Displays the column label for the dimension.

   - **Medium** — Displays the row label for the 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.
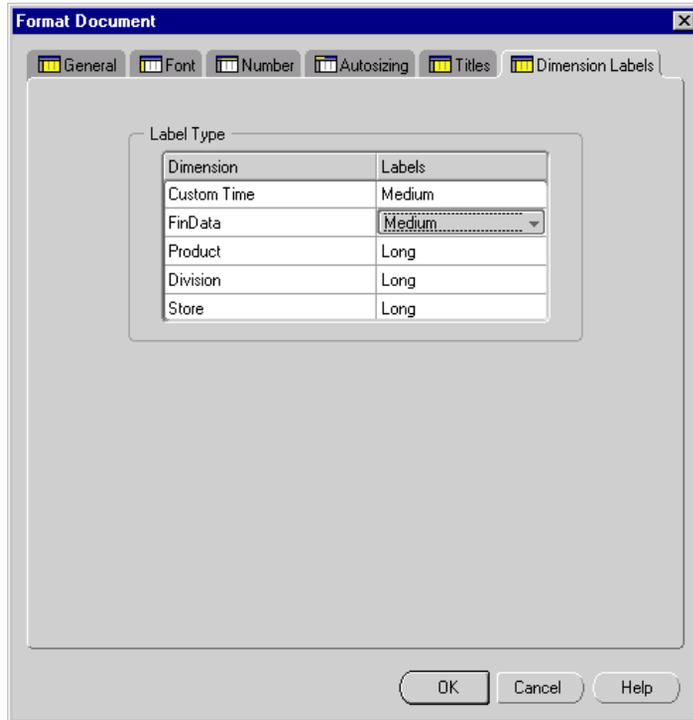


## Formatting Selected Rows and Columns in Reports

### 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 your formats to the data in the rows and columns and you can apply separate formats to the row and column labels. You can also specify formats for numeric values in selected rows or columns.

**Note:** Formats for selected rows, columns, and labels take precedence over formats that apply to the entire report.

## Procedure: Formatting data in selected rows or columns

To specify font, colors, alignment, and borders for data in selected rows, columns, or row and column labels, follow these steps:

1. With the report open in the workspace, select the rows or columns 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 Fonts and Borders tab displays the current settings for fonts 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.
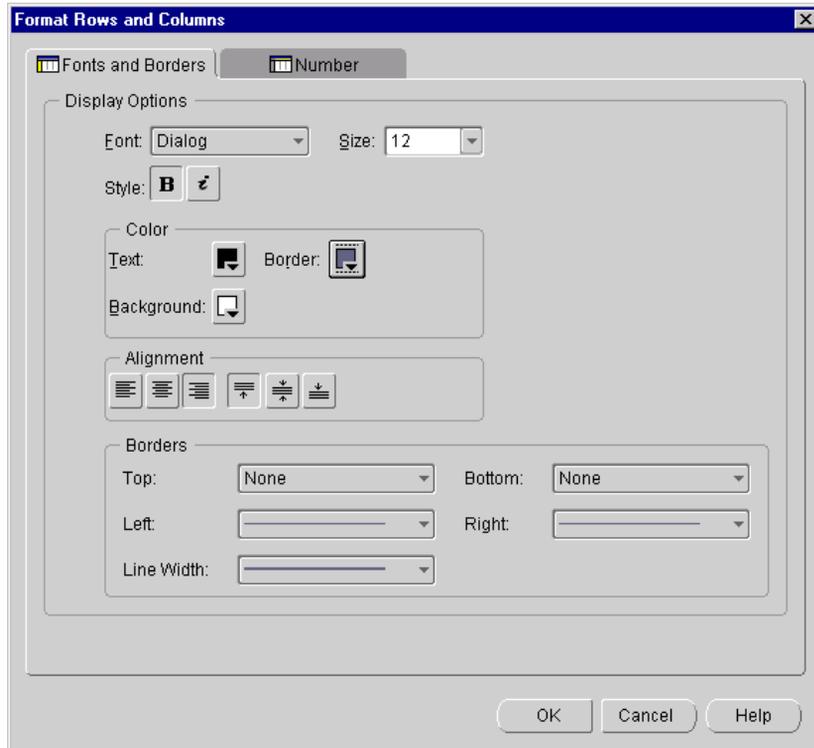


## Procedure: Formatting numeric values in selected rows or columns

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 Number tab displays the current settings for numeric values. You can modify the following settings:

| Option | Description |
|---|---|
| Number of Decimal Digits | Number of decimal places |
| Positive Values | Format for positive numbers<br><br>(Available if you do not choose the Currency/Percent option) |
| Negative Values | Format for negative numbers<br><br>(Available if you do not choose the Currency/Percent option) |
| Scale Values Down By | Scaling for large numbers |
| Thousands Separator | Display the thousands separator |
| Leading Zero | Display leading zeros |
| Currency/Percent Formatting | Activates currency/percent format options:<br><br>■ Symbol — Symbol for dollars, yen, pounds, francs, or percent<br><br>■ Positive Values — Format for positive values<br><br>■ 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.
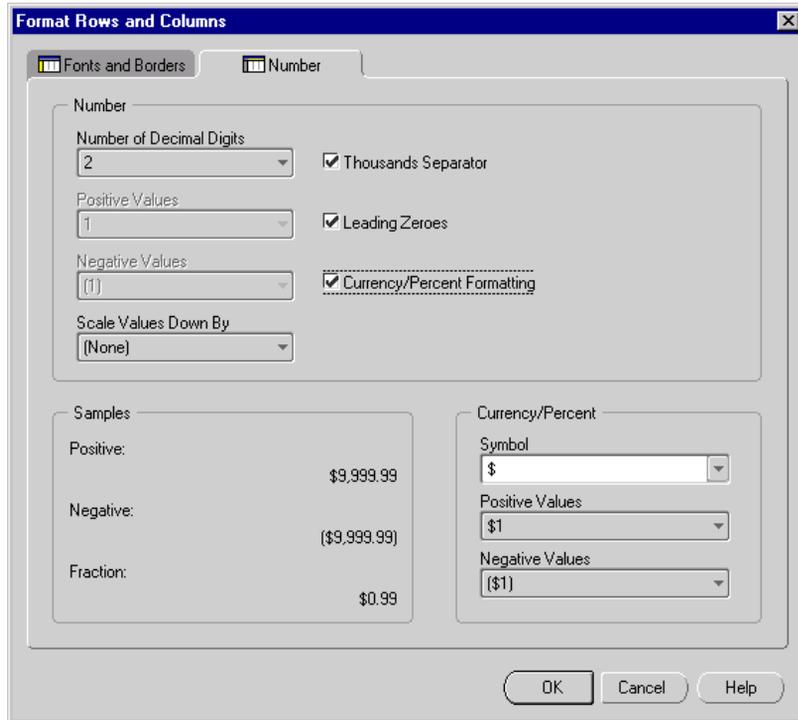
# Clearing Row and Column Formats

## About clearing row and column formats

You can clear row and column formats that have been applied using the **Format Rows and Column** feature. You can clear all formats, or you can select specific rows and columns to clear.

**Note:** Clearing row and column formatting removes any formats that have been applied to selected rows and columns. It does *not* remove formats that apply to the entire document. To change document-based formats, you must use the appropriate tab in the Format Document dialog box. For more information, see "Formatting Elements for an Entire Report" on page 20-2.

## Procedure: Clearing all row and column formats

To remove row and column formatting from all rows, columns, and labels, 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 formatting

To remove row and column formatting from specific rows, columns, or row and column labels, follow these steps:

1. With the report open in the workspace, select the rows, columns, or row and column labels from which you want to remove 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 all rows and columns, click the highlighter at the intersection of the rows and columns.

- 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 data values for a financial data item meet specified criteria. This is referred to as *color coding*. Color coding enables you to highlight exceptions and map trends.

**Note:** Color coding formats take precedence over formats that apply to the entire reports. Color coding formats also take precedence over formats that apply to rows and columns.

## Color coding rules

A color coding rule is composed of the following information:

- One or more conditions that the data must meet in order to have the specified formats.

- A set of formatting options that specify 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 financial data item 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 Budget is greater than or equal to a specified amount.

- When values of a financial data item relate to the values of another financial data item 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 Budget is 10% greater than Budget 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 Budget is greater than or equal to a specified number *and* Budget 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 formatting — Stoplight formatting is a special type of color coding that highlights trends. When you apply stoplight formatting, 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 formatting, font options are not available.

- Color —You can specify the font color. If you selected stoplight formatting, font color options are not available.

- Background color — You can specify the background color for the cell. If you selected stoplight formatting, the label for this option is "Cell Color."

You can also specify that a rule use default formats for font or color. The default formats are the formats that have been set up in data formatting. If no formats have been specifically set, the formats in the document on which the document is based determine the defaults.

## Using multiple conditions and rules

You can define one or two conditions for each rule and associate each financial data item 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 that was defined last 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 FDI dialog box, select the financial data item to which the color coding rule applies. Choose **Use Stoplight Formatting** to apply stoplight formatting.

For information about stoplight formatting, see "Color coding format options" on page 20-22.

**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 financial data item with a numeric value.

- Choose **FDI** to compare the financial data item with another financial data item.

For more information, see "Color coding rules" on page 20-21.

5. If you selected **value** in Step 4, proceed as follows:

   a. In the **where** box, select a financial data item on which to base the value condition. You can select the default, or you can select an alternate financial data item.

   b. In the **is** box, select an operator that specifies how the data values in the selected financial data item must compare to the value in the value box.

   c. In **the value** box, specify a number to which the data values in the financial data item will be compared.

6. If you selected **FDI** in Step 4, proceed as follows:

   a. In the **where** box, select the first financial data item to use in the comparison. You can select the default, or you can select an alternate financial data item.

   b. In the **is** box, choose the operator that specifies how the data values in the first financial data item must compare to the data values in the second financial data item.

   c. In **the FDI** box, specify the second financial data item to use in the comparison. You can select the default, or you can select an alternate financial data item.

   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*

   ■ Choose **Add a second data condition** to define a second condition for this rule.

8. If you chose 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**

   - **Apply when either first or second condition is met**

9. Choose **Next** to continue.

10. 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, or you can select **Default** to use default formats for any element.

    **Note:** If you selected **Stoplight Formatting** in Step 2, you can only choose the cell background color.

11. Choose **Next** to continue.

12. 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.

13. Choose **Finish** to continue.

    **Result:** The Color Coding dialog box appears. It includes information regarding the appearance, description, and financial data item or items for the rule.

14. 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. Data cells that meet the conditions are displayed with a user-specified formatting.

## Example: Color coded report with stoplight formatting

The following illustration shows a color coded report with stoplight formatting. Data cells that meet the conditions are displayed as solid blocks of color. An actual data value only appears when you click in a cell.

### Working with saved color coding rules

If you are an analyst user, you can modify or delete a color coding rule that you have 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.

## Formatting Web Graphs

### About graph format options

You can specify formatting for a graph as follows:

- 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 the font, color, page position, and orientation.

### Persistence of graph formats

Whether graph formats persist beyond your current working session depends on the type of user that you are set up to be.

- If you are an analyst user and save the graph, formats are saved with the document.

- If you are not an analyst user, you can apply formats while the graph is open in the workspace, but your settings will not be retained when you close the document.

## Procedure: Specifying title, subtitle, and footnote for a graph

To specify title, subtitle and footnote for a graph, follow these steps:

1. With the document open in the workspace, click the **Format Document** button on the Document toolbar.

   

   **Result:** The Format Document dialog box appears. 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. In the Font Properties box, select the font name, size, color, and style (bold/italic) for the text.

   b. In the Alignment box, select an alignment option for the text.

   c. In the Display Options box, choose **Show** to display the specified text element in the current document.

   d. 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 title, subtitle, and footnote for a graph

The following illustration shows the Format Document dialog box for graphs. The Titles tab is active.
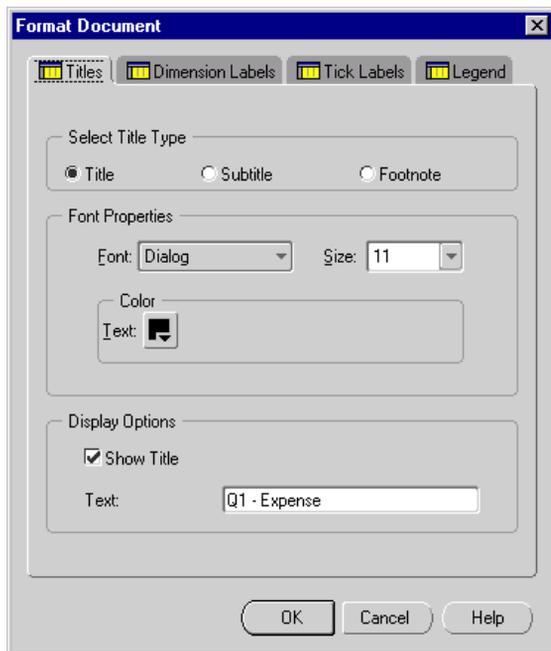
## Procedure: Selecting dimension label types for a graph

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. The Titles tab is active.

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 choose 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 (row label) is displayed; if the dimension is in the group edge, the short name (column label) is displayed.

   - **Long** — Displays the dimension value description name.

   - **Short** — Displays the column label for the dimension.

   - **Medium** — Displays the row label for the dimension.

4. Repeat the previous step for each dimension for which you want to set labels.

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.
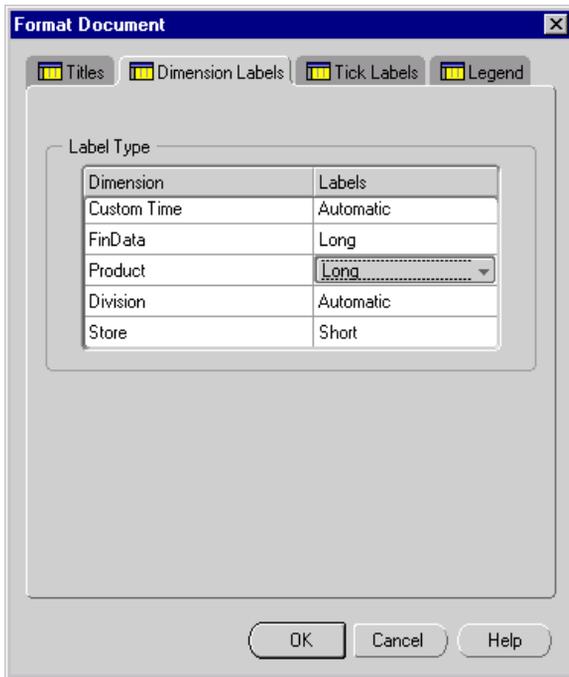
## Procedure: Formatting tick labels for a graph

To format tick labels on the X-axis of a graph, follow these steps:

1. With the document open in the workspace, click the **Format Document** button on the Document toolbar.



   **Result:** The Format Document dialog box appears. The Titles tab is active

2. Select the **Tick Labels** tab.

3. The Font Properties box displays the current font settings for tick labels. You can make new 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 font color for the label text.

4. To offset every other tick label for readability, choose **Stagger**.

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 a default interval that is set up by the system.

   - **Manual** — Skips tick labels using interval settings that you select in the Skip Amount box.

   If you do not want to skip any tick labels, choose **None**.

6. 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.
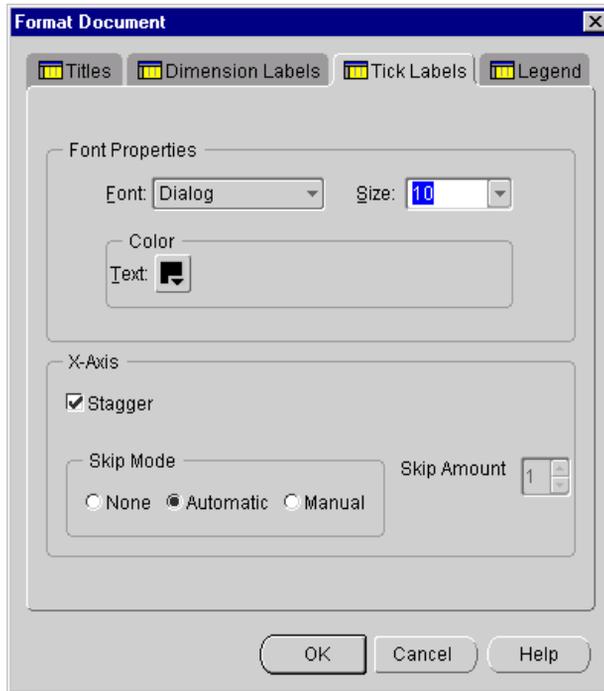
## Procedure: Formatting the legend for a graph

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. The Titles tab is active

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 make new 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 legend 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.

# 21
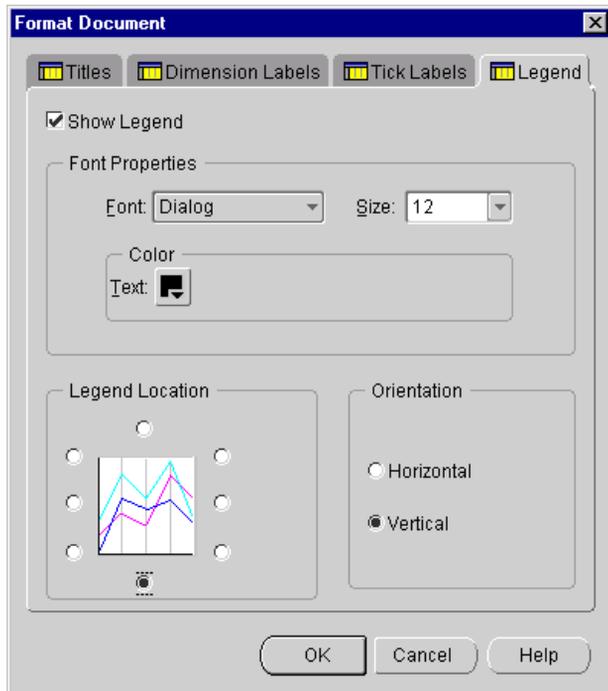
# Working with Web Data Entry Forms

## Chapter summary

This chapter describes how to work with data entry forms in the Financial Analyzer Web interface.

## List of topics

This chapter includes the following topics:

- About Web Data Entry Forms
- Entering Data into Web Data Entry Forms
- Submitting Data from Web Data Entry Forms
- Printing Web Data Entry Forms
- Copying Data from Web Data Entry Forms
- Exporting Data from Web Data Entry Forms
- Working with Data Entry Forms in the Navigation List

# About Web Data Entry Forms

## Description: Web Data entry forms

An administrator creates data entry forms on an Administrator workstation in the Windows client and distributes the forms. You use the Web interface to open a data entry form, enter data, and submit data to the shared database.

## Example: Web data entry form

The following illustration shows an example of a Web data entry form.



## Opening a Web data entry form

Data entry forms are displayed as objects in the navigation list, located in the left frame of your browser. Some data entry forms might appear within individual folders in the navigation list, while others might appear in the main Documents folder.

To open a data entry form, 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 data entry form, right-click the main Documents folder or a specific document 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 Web data entry forms

The Document toolbar appears at the top of an open data entry form. The buttons enable you to perform the following functions:

| Button | Name | Function |
|--------|------|----------|
|  | **Export** | Export data and labels from the data entry form to a comma delimited (.csv), tab delimited (.txt), or Excel 2000+ (*.htm) file. |
|  | **Copy to Clipboard** | Copy selected data and labels from the data entry form to the Windows clipboard |
|  | **Paste** | Paste data from the Windows clipboard into the data entry form |
|  | **Submit Data** | Submit data in the data entry form to the shared database |
|  | **Recalculate Data** | Recalculate the data in the data entry form<br>**Note:** This button appears only if a solve has been associated with the data entry form |

| Button | Name | Function |
|---|---|---|
|  | **Print** | Print the data entry form |
|  | **Help** | Access Financial Analyzer HTML Help |

## Closing a Web data entry form

To close a Web data entry form, click its close button, located in the upper right corner of the form.



If you have entered or modified data in the form, you will be prompted to save your changes by submitting the data to the shared database. Changes that are not submitted will not be permanently saved.

# Entering Data into Web Data Entry Forms

## About entering data into Web data entry forms

You can enter numeric or text data into one or more cells of a data entry form by typing in the data or by pasting data from the Windows clipboard. You can paste data that you have copied from other cells in the form. You can also paste data that you have copied from another Windows application, such as a spreadsheet.

As you enter data, you can adjust the size of the columns to better view your work. If a solve has been associated with a financial data item in the form, you can recalculate the data.

## Procedure: Manually entering data into a Web data entry form

Follow these steps to manually enter data into a Web data entry form:

1.  With the data entry form open in the workspace, click a cell into which you want to enter data.

    **Note:** You cannot enter data into cells that are gray in color. These cells have been locked by your administrator.

2.  Type a value or text into the cell.

    If you are entering multi-line text data, press Alt+Enter to create a new line.

3.  Press **Enter** or click another cell.

    **Result:** The value or text that you entered appears.

4.  Repeat Steps 2 and 3 for each cell in which you want to enter data.

5.  To display another page of the form, click the arrow on the page label at the top of the data entry form and select the page that you want to display.

    **Note:** Changing the page automatically recalculates the data on the current page.

## Procedure: Pasting data into a Web data entry form

To paste data from the Windows clipboard into a cell or cells of a Web data entry form, follow these steps:

1.  With the data entry form open in the workspace, select the cell or cells into which you want to paste data.

    **Note:** You cannot paste data into cells that are gray in color. These cells have been locked by your administrator.

2.  Click the **Paste** button on the Document toolbar.

    

    Alternatively, you can click the right mouse button and choose **Paste** from the popup menu.

**3.** If you see a dialog requesting additional privileges, choose **Grant**.

**Result:** If the target area is verified, data is pasted into the specified cells. However, if one or more cells in the target area are locked, not editable, or if the data will not fit into the area, a message appears.

## Procedure: Adjusting column width in a Web data entry form

To adjust the column width in a Web data entry form, 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.

## Procedure: Recalculating data in a Web data entry form

To recalculate the data in a Web data entry form, click the **Recalculate** button on the Document toolbar.



# Submitting Data from Web Data Entry Forms

## About submitting data to the shared database

When you submit data from a Web data entry form to the shared database, a data submission task is created. At any time you can view a list of your pending updates that have not yet been processed.

## Procedure: Submitting data from a Web data entry form

To submit data to the shared database, click the Submit button on the Data Entry toolbar.

## Procedure: Viewing pending updates

To view pending updates, click the **View Pending Updates** button on the Navigation toolbar.

# Printing Web Data Entry Forms

## About printing Web data entry forms

You can print a Web data entry form and specify settings that determine how the printed pages will look.

## Procedure: Printing a Web data entry form

To print a Web data entry form, 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 Financial 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. In the Order box, you can specify the order in which to print the pages. You can 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 printed data entry form. Choose one of the following options:

   - **Adjust to** — Scales each logical page 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 fit completely within 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

   - Specify whether row, column, and page labels will be repeated on each printed page

   - 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.

# Copying Data from Web Data Entry Forms

## About copying data from Web data entry forms

You can copy data in contiguous cells from a data entry form to the Windows clipboard. You can choose to copy data that is not rounded and has been stripped of special formats such as thousands separators, currency signs, and percent symbols or you can include these elements. You can also copy row and column labels.

## Procedure: Copying data from a Web data entry form

To copy data from a data entry form, follow these steps.

1. With the data entry form 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 and select a copy option from the popup menu.

3. Choose a copy option:

   - **Copy** — Copies data that is not rounded and 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 data that is not rounded and excludes formats such as thousands separators, currency signs, and percent symbols. Also copies row and column labels.

     * **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 labels.

* **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 Web Data Entry Forms

## About exporting data from Web data entry forms

You can export data from Web data entry forms 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 formats.

**Note:** If the form 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 a data entry form

To export data from a data entry form, 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.  In the Export box, 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.

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 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 Financial 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.

■ **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 21-13.

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

The following example shows the Export dialog box. The user has selected Excel 2000+ (*.htm) as the export file type.
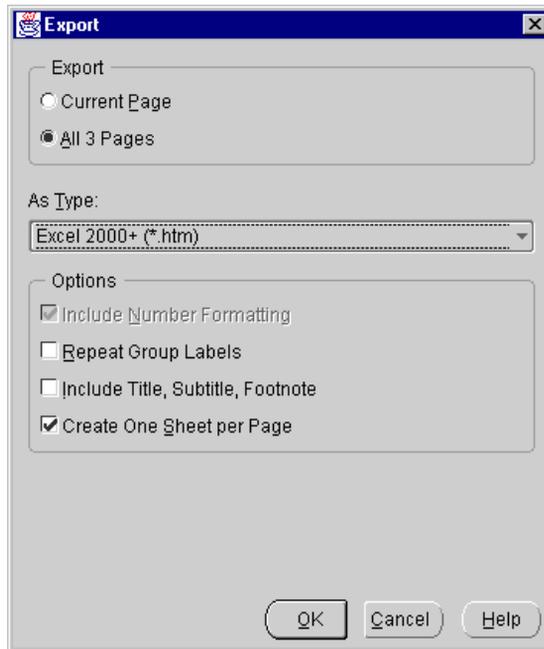


## About Excel 2000+ output files

When you export to a single worksheet in Excel 2000+ (*.htm) format, Financial Analyzer creates 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, Financial 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 Data Entry Forms in the Navigation List

## Navigation list functions for data entry forms

You use the navigation list to open data entry forms. In addition, you can work with data entry forms as follows:

- Search for a data entry form

- Print one or more data entry forms and other documents

- View the object properties of a data entry form

## Procedure: Searching for a data entry form

To search for a data entry form, 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.

## Printing one or more data etnry forms and other documents

### About printing multiple documents

You can select multiple data entry forms and other documents in the navigation list and print them with a single command. 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. When you print multiple documents, Financial Analyzer prints all pages of the selected documents.

### Procedure: Printing multiple documents

To print one or more saved 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: Viewing the properties of a data entry form

To view the properties for a data entry form, right-click the document in the navigation list and choose **Properties** from the popup menu.

The following information appears:

- Name
- Created
- Modified
- Class

# 22

# Express Spreadsheet Add-In

## Chapter summary

This chapter provides an overview of how to use the Express Spreadsheet Add-In with Financial Analyzer in the Windows client environment. For information about the latest functions and features, refer to the release notes for Express Spreadsheet Add-In.

## Who should read this chapter

Read this chapter if you have installed Express Spreadsheet Add-In for use with Financial Analyzer.

## List of topics

This chapter includes the following topics:

- About the Express Spreadsheet Add-In
- Using Express Spreadsheet Add-In Directly with Financial Analyzer
- Attaching Financial Analyzer Databases
- Using the Data Collection Toolkit
- Implementing the Data Collection Toolkit
- Data Collection Toolkit Technical Reference

# About the Express Spreadsheet Add-In

## Working with Financial Analyzer data in a spreadsheet

Oracle Express Spreadsheet Add-In (hereinafter referred to as "Express Spreadsheet Add-In") is an add-in to Microsoft Excel. The add-in allows you to fetch data from one or more Financial Analyzer databases and work with the data in a spreadsheet in the Windows client environment.

## Methods for using Express Spreadsheet Add-In

You can use the Express Spreadsheet Add-In directly with Financial Analyzer. You can also use it to create a spreadsheet data collection template that can serve as a lightweight data entry mechanism for infrequent users of Financial Analyzer.

## Related information

For up-to-date information about Express Spreadsheet Add-In features and functions, see the Express Spreadsheet Add-In release notes.

# Using Express Spreadsheet Add-In Directly with Financial Analyzer

## Requirements for using Express Spreadsheet Add-In directly

In order to use Express Spreadsheet Add-In directly with Financial Analyzer, the Express Spreadsheet Add-In software must be installed on your PC and in Excel. You must also have access to a Financial Analyzer database.

## Creating a query

Installing the Express Spreadsheet Add-In into Financial Analyzer creates an **Express** item on the Excel menu. From the Express menu, you choose **Run Express Wizard** to create a query.

## Working with a query

Once you create a query, you can use other Express menu options to perform the following functions:

- Rotate the data

- Drill in the data

- Make new data selections

- Work with custom measures

- Save data in the spreadsheet

If you have the proper access, you can also write changes to the database.

## Related information

For detailed information about working directly with Financial Analyzer, see the Express Spreadsheet Add-In Help system.

# Attaching Financial Analyzer Databases

## Database attach modes

You attach Financial Analyzer databases in different "modes," depending on the tasks that you want to perform. The mode in which you can attach a database depends on three things:

- Your current default mode for attaching databases

- Whether you select the Read Only option in the Attach Database dialog box

- Whether you have write-access to the database file at the operating system level

## Attaching personal databases

You can attach to a Financial Analyzer personal database in either read-only or read/write mode. Once you attach to a personal database, you can use the Express Wizard in Excel to query Financial Analyzer data.

You can also transfer data from the spreadsheet to the attached personal database if you have write-access to the database and you attach the database in an appropriate mode.

## Attaching shared databases

You can attach a shared database in read-only mode.

Financial Analyzer enables you to access data in the shared database based on your operating system user name. Therefore, you need the following to gain access.

- Set your authentication type to Host or Domain in the Express connection file that is used to make a connection to Express from the Express Spreadsheet Add-In.

- Ensure that your operating system user name is associated with a Financial Analyzer user. This name determines your access to financial data items and dimensions.

    - If your operating system user name is associated with more than one Financial Analyzer user, then your access rights will default to the access rights of the first Financial Analyzer user name defined.

    - If your operating system user name is associated with a Financial Analyzer user who is defined as an Administrator then this user will take precedence over any other Financial Analyzer user.

Once you attach to a shared database, you can use the Express Wizard in Excel to query Financial Analyzer data. You can also transfer data from the spreadsheet to the attached shared database but you cannot permanently save changes to the shared database.

## Important: Attaching multiple databases

Do not attach multiple databases that use the same object names. Doing so can produce unpredictable results.

## Connecting directly to Financial Analyzer

If Financial Analyzer is running on your desktop, then the Express Spreadsheet Add-In will connect directly into your Financial Analyzer session.

- If you are running an Administrator or Budget workstation, you will be directly connected to the Financial Analyzer session with the personal database attached read/write.

    Once you attach to a personal database, you can use the Express Wizard in Excel to query Financial Analyzer data. You can also transfer data from the spreadsheet to the attached personal database.

- If you are running an Analyst workstation you will be directly connected into the Financial Analyzer session with the shared database attached read only.

  **Note:** The Express Add-In option, **Permanently write changes to databases attached read only**, does not apply to analyst users and should not be used.

- Once you attach to a shared database, you can use the Express Wizard in Excel to query Financial Analyzer data. You can also temporarily transfer data from the spreadsheet to the attached shared database, but you cannot permanently save changes to the shared database.

If the Express Spreadsheet Add-In is directly connected to a Financial Analyzer session you cannot use the Express Spreadsheet Add-In Rollback feature.

### Related information

For more information about attaching databases, see the following topics in the Express Spreadsheet Add-In Help system:

"Attaching Databases"
"Attach Database Dialog Box"
"Attach Mode Options"

For information about configuring connections, see the *Oracle Express Database Administration Guide.*

## Using the Data Collection Toolkit

### Introduction

This section describes the Financial Analyzer data collection toolkit for use with Microsoft Excel. This toolkit enables you to create a simple lightweight data entry mechanism for infrequent users of Financial Analyzer.

### Requirement for using data collection toolkit

In order to use the data collection toolkit, a user must have a thin client setup. A thick client cannot make the required connection.

## Toolkit Components

The Excel Data Collection toolkit is made up of the following components:

■ The Express Spreadsheet Add-In

■ Express API callouts to Financial Analyzer functionality

■ Standard Excel formatting features and Excel Visual Basic for Applications (VBA)

## Toolkit Sample

A sample produced using the toolkit is provided. The sample is composed of the following files:

■ SAMPLE.XLS — An Excel workbook containing a sample data collection worksheet and a macro module containing routines to control functionality.

■ SAMPLE.INF — A text file containing Express programs for recalculating and submitting spreadsheet data. The programs can be incorporated in a Financial Analyzer custom database using the Express INFILE command.

These two files are located in the DOC\ADD_IN folder on the Oracle Financial Analyzer CD-ROM.

## General procedure for data collection

Using this toolkit sample, users can collect data using the following procedure.

1. The user opens the workbook template in Excel. He or she is prompted for user id and password to access Financial Analyzer.

2. The user logs in. Financial Analyzer sets the appropriate access to the shared database and attaches the shared database as read-only.

3. Once the shared database is attached, the user can:

   ■ Enter new data into areas of the workbook specified by the template

   ■ Apply a Financial Analyzer solve definition to recalculate data in the workbook

   ■ Page through the query

   ■ Submit all changes made to the data in the workbook using the standard Financial Analyzer submit process

# Implementing the Data Collection Toolkit

## Before you begin

Before you can build a data collection template, make sure of the following:

- The Express Spreadsheet Add-In software is installed on your PC and in Excel.

- You have access to an Express Client Connection file to make a connection to the instance of Express Server used by the appropriate Financial Analyzer shared database.

  **Note:** The *Oracle Express Database Administration Guide* describes how to configure Express connections.

- The user id for your operating system is associated with a Financial Analyzer user name that has appropriate access to the shared database.

You must also ensure that the following settings on the Database tab are specified in the Options dialog box that is accessed from the Express menu in Excel.

| Property | Setting |
|---|---|
| Default Attach Mode | Read only |
| Permanently write changes to databases attached read only box | Off |

You must also ensure that the following settings on the Format tab are specified in the Options dialog box that is accessed from the Express menu in Excel.

| Property | Setting |
|---|---|
| Show Page Dimension Controls box | On |
| Preserve Formatting After Drilling/Selection box | On |
| Resize Columns to Fit Data box | Off |

## Implementation process

To implement the toolkit, follow these general steps.

1. Create an Excel workbook template as described in the topic, "Step 1: Creating an Excel workbook template" on page 22-8.

2. Define the query or queries using the Express Spreadsheet Add-In as described in the topic, "Step 2: Defining queries using the Express Spreadsheet Add-In" on page 22-8.

3. Insert an Excel macro module in the workbook as described in the topic, "Step 3: Inserting an Excel macro module in the workbook" on page 22-9.

4. Define routines in the macro module as described in the topic, "Step 4: Defining routines in the macro module" on page 22-9.

5. Create a custom Financial Analyzer database as described in the topic, "Step 5: Creating a primary custom Financial Analyzer database" on page 22-13.

6. Define Express programs in the custom database to handle recalculate and submit procedures as described in the topic, "Step 6: Defining Express programs" on page 22-13.

7. Clear each query in the workbook as described in the topic, "Step 7: Clearing the queries" on page 22-15.

8. Install the workbook template on each users' desktop as described in the topic, "Step 8: Installing the template on users' desktops" on page 22-15.

## Step 1: Creating an Excel workbook template

To implement the toolkit, you must create an Excel workbook template to use for data collection. By incorporating Excel VBA routines in the workbook, you determine what functionality the template makes available to users.

Using the new template, users can directly access their Financial Analyzer shared database. The users' profiles in Financial Analyzer determines the data to which they have access. Users cannot use the template if they disconnect from the server where the shared database is located.

One workbook can be created for many users. The template workbook can be distributed to users through electronic mail or via a network. Oracle Corporation recommends that each user have a personal copy of the workbook file. This is preferable to a situation in which multiple users access a shared copy.

## Step 2: Defining queries using the Express Spreadsheet Add-In

Queries that are defined using the Express Spreadsheet Add-In are bound to the database in which they were created. Therefore, you must create the queries using the shared database that users will be accessing through the workbook template.

To define queries, follow these steps.

1.  Open a new workbook template in Excel.

2.  Connect to the appropriate Financial Analyzer shared database and attach it read-only.

3.  Run the Express Wizard to define the necessary query or queries.

    For instructions on running the Express Wizard, refer to the Express Spreadsheet Add-In Help system.

4.  Format the query or queries as desired using standard Excel formatting features.

    **Tip:** Although editing the query will preserve formatting in most cases, try to ensure that the query has all the necessary information before beginning formatting.

5.  Save the spreadsheet.

## Step 3: Inserting an Excel macro module in the workbook

Next, you must create an Excel Macro Module in the workbook. In this module you will define a number of macro routines to control functionality within the workbook.

To insert a macro module in Excel, follow these steps.

1.  Select a sheet in the workbook. The module will be inserted to the left of the sheet you select.

2.  From the Insert menu, choose **Macro**, and then choose **Module.**

## Step 4: Defining routines in the macro module

In the macro module, define a number of macro routines to control functionality within the workbook.

The sample workbook template, SAMPLE.XLS, uses the following macro routines to control functionality within the workbook. These routines use Express Spreadsheet Add-In API methods that must be defined within the macro module of the workbook.

**Note:** For code listings of the sample macros described here, refer to "Data Collection Toolkit Technical Reference" on page 22-16.

### Auto_Open routine

Auto_Open is a predefined Excel procedure that runs whenever a workbook is opened. Auto_Open ensures that the configuration for the workbook is always the same on startup.

In the sample workbook template, the Auto_Open procedure calls the Startup routine.

### Startup Routine

The Startup routine performs the following tasks:

- Makes a connection into Express Server.

  The Startup routine uses the Express Spreadsheet Add-In *XPConnect* method to establish a connection with Express Server. The login routine is based on the Express Client Connection file for a user, described in the topic "Before you begin" on page 22-7.

  If a connection cannot be made, XPConnect returns FALSE and the workbook is closed.

- Sets the Excel environment.

  The Startup routine sets the following Excel options and environment variables:

  - Turns screen updating off to improve macro performance

  - Sets the Calculation option to Manual

  - Turns the Recalculate Before Save option off

  - Turns the Express menu off to limit the functionality available to users

- Runs the Financial Analyzer Startup routine. The Financial Analyzer Startup routine is located in the OFASERVE database. This database must be attached first.

  The Startup routine runs a Financial Analyzer API named OFA.EXT.INIT. The Express Spreadsheet Add-In *XPExecute* method attaches the OFASERVE database and executes OFA.EXT.INIT.

  OFA.EXT.INIT performs the following tasks:

  - Attaches all code databases

  - Populates temporary Financial Analyzer catalogs

  - Attaches the shared database

- Applies the appropriate access rights to the shared database based on the operating system user id entered at login

- Checks for outstanding data submissions.

  Because the user is making changes to a shared database that is attached read-only, the changes are permanently written to the shared database only when the user's data submission is processed by the Task Processor.

  If the user exits a session where a submission has been made and then creates a new session against the same shared database before the earlier submission has been processed, then the user will be working with out-of-date data.

  This part of the routine stops the user from entering the workbook if any submissions made by that user are waiting in the Task Processor queue.

  The Financial Analyzer API, TK.CHK.UNPROC, returns TRUE if any tasks for the user are still waiting in the Task Processor queue.

  **Note:** The internal Financial Analyzer user name is stored in the SHR.USR.ROLE variable in Express during a session.

- Sets Express Spreadsheet Add-In options.

  Certain Express Spreadsheet Add-In options should be set in a particular way. Others can be varied by implementation. The Express Spreadsheet Add-In XPSetOption method can be used to set individual options.

- Registers the shared database.

  Once the shared database has been attached, the Express Spreadsheet Add-In XPDatabaseAttach method registers with the defined active query. After the registration, the query can be refreshed from the database by using the Express Spreadsheet Add-In XPRefresh method.

  **Note:** When running Express Server on NT, XPDatabaseAttach will only accept a drive path and not a UNC. All other references to the shared database in Financial Analyzer will also need to use a drive path.

  **Tip:** When you call XPRefresh, use coordinates that reference an active cell of the query.

- Disables access to the Selector through the query.

- Users can access the Selector by double-clicking on a query. If you do not want to allow users to change the status of the query then you can disable this option by setting the OnDoubleClick property to null. If you have queries defined on multiple sheets, you will need to do this for each sheet.

### Calculation Routine

In the sample workbook template, the calculation routine writes back changes made to the current page to the shared database and then runs a solve definition in the database.

The Express Spreadsheet Add-In XPSetCustomWriteCommand method sets the Express program that will handle the writing of the changes to Express. Then the Express program RECALC.OFAXSA is called.

The RECALC.OFAXSA program performs the following tasks:

■ Applies the changes to the database

■ Filters out financial data items that should not be updated

■ Runs a solve definition

The Express Spreadsheet Add-In XPWrite method executes the write for any changes made to the page. After the calculation routine has been run, the query refreshes to show the results of the solve definition.

**Tip:** When calling XPWrite, supply coordinates that reference an active cell in the query.

To execute the Calculation routine, the user chooses buttons created with Excel VBA that have the appropriate macros assigned.

### Submit routine

In the sample workbook template, the submit routine takes the data that has been changed by the user in the current session and creates a submit data task.

Initially, the Submit routine checks to see if the user has changed any data for the current page but has not yet run the calculation routine.

If this is the case, the calculation routine is run before the data submission. The Express Spreadsheet Add-In XPGetChangeScript method identifies if a change has been made to the current page that has not been written back to Express.

In the sample the data submission is executed by the Express program SUBMIT.OFAXSA. This program sets the status of the financial data items to be submitted and creates the data submission task.

**Tip:** When calling XPGetChangeScript, supply coordinates that reference an active cell in the query.

To execute the Submit routine, the user chooses buttons created with Excel VBA that have the appropriate macros assigned.

### Auto_Close

Auto_Close is a predefined Excel procedure that is run every time a user closes the workbook. In the sample workbook template, Auto_Close uses the Express Spreadsheet Add-In XPClose method to close any open connection to Express Server. XPClose also calls the Excel Close method that closes the workbook, automatically saving any changes that have been made.

## Step 5: Creating a primary custom Financial Analyzer database

The Financial Analyzer custom database should be created in the CODE directory and its name declared in the OFACDCF.CFG file.

Any custom Express programs or objects defined during a Financial Analyzer implementation should be defined in the primary custom database. This database should be created in the code directory and its name declared in the OFACDCF.CFG file.

For example if you have created a primary custom database called CUSTOM, your OFACDCF.CFG file should contain the following information:

```
 [Primary Custom Database]
OFALCNAME=custom
```

## Step 6: Defining Express programs

You define custom Express programs to handle the recalculate and submit procedures.

The sample file, SAMPLE.INF, contains two Express programs that handle the recalculate and submit procedures. The programs can be incorporated in a Financial Analyzer custom database using the Express INFILE command.

### Recalculate Procedure

In the sample workbook template, the recalculate procedure RECALC.OFAXSA is defined as a boolean program in the primary custom database.

The RECALC.OFAXSA program performs the following tasks:

1. Applies the changes to the database
2. Filters financial data items that should not be updated
3. Runs a solve definition

The status of dimensions is tracked through the use of valuesets. Valuesets should be defined for all the dimensions of the financial data items being written and solved. The status of the valuesets is initially be set to null. In the sample, valuesets are defined for the Line, Org, Prod and Time dimensions.

The XPSetCustomWrite method passes to the program a string of qualified data references (QDRs) that reference the cells of the query that have been changed. RECALC.OFAXSA evaluates each QDR to determine if that financial data item should be written to. In the sample, the financial data items to be written to are BUDG and BUD.ASMP99. The status of the dimensions of each QDR for these financial data items is added to the appropriate valueset and the QDR is executed. This routine filters out those financial data items that are present in the query but that should not be altered.

In the sample, only the part of the financial data item that has changed will be solved. The status of the solve is set by the status of the valuesets. In the sample, the only exception to this is the LINE dimension. The solve runs a model on the line dimension and status must be set to all.

Also, only the data relating to the pages of the query that have changed will be submitted. In the sample, the Prod and Org dimensions are the page dimensions. A list of Prod and Org values that have been changed between submissions is kept in two temporary variables named OFAXSA.PRD.LIST and OFAXSA.ORG.LIST. These are defined as single cell text variables in the primary custom database.

The solve definition is run by the Financial Analyzer API named SO.RUN.DFN. SO.RUN.DFN is passed two arguments:

- The solve definition to be run expressed as a value of SO.ENTRY

- The list of valuesets that correspond to the dimensions of the financial data item being solved

**Tip:** You can find the value of SO.ENTRY you need to pass by looking at SO.DESC.

### Submit Procedure

In the sample workbook template, the submit procedure SUBMIT.OFAXSA is defined as a Boolean program in the primary custom database.

SUBMIT.OFAXSA sets the status of the financial data items to be submitted and creates the data submission task. In the sample, the two temporary page variables named OFAXSA.ORG.LIST and OFAXSA.PRD.LIST contain the list of page dimension values that have been changed. If either temporary page variable is empty then the program exits without submitting.

The dimension status of the financial data items to be submitted is set through the dimension valuesets. In the sample, the status for Line is set to all because a model has been solved on that dimension. The status of Org and Prod are set by the temporary page variables. The status of Time is set according to the values shown in the query.

The submit is run by a Financial Analyzer API named SB.DATA.SHR. SB.DATA.SHR is passed the following two arguments:

- The list of valuesets that correspond to the dimensions of the financial data item being submitted

- The object name of the financial data item to be submitted

**Tip:** To keep changed data from being submitted more than once, the temporary page variables OFAXSA.ORG.LIST and OFAXSA.PRD.LIST are set to NA at the end of the procedure.

## Step 7: Clearing the queries

Before the workbook is ready for distribution each query should be cleared. Clearing the query clears labels and data from the query and prepares it to be opened by the users. When the user opens the workbook the labels and data are placed into the query according to their dimension access definitions.

To clear a query, follow this procedure.

**1.** In the Excel workbook, position the cursor in any cell that contains data for the query you want to clear.

**2.** Select **Clear Query** from the Express menu.

The Express Spreadsheet Add-In displays a confirmation box.

**3.** Choose **Yes** in the confirmation box to clear the query.

## Step 8: Installing the template on users' desktops

Before they can use the data collection template, each template user needs the following:

- The Express Spreadsheet Add-In software installed on their PC and in Excel. The *Oracle Express Spreadsheet Add-In User's Guide* contains information on installing the Express Spreadsheet Add-In. It includes a list of supported versions of Excel and other software and hardware requirements.

- Access to an Express Client Connection file to make a connection into the instance of Express Server used by the appropriate Financial Analyzer shared database. The *Oracle Express Database Administration Guide* describes how to configure Express connections.

- A Financial Analyzer user name.

- The appropriate dimensions, financial data items, hierarchies, attributes, models and solve definitions distributed to them.

- **Note:** Access to the data defined in the template will depend on the structure distributed to each Financial Analyzer user name. If more than one Financial Analyzer user name is assigned to an operating system userid, then the first Financial Analyzer user name defined will be used. The exception to this is if the operating system user id is assigned to the Financial Analyzer user name of the Administrator. In that case, this profile will be used.

The workbook template can be distributed to users through electronic mail or via a network. Oracle Corporation recommends that each user have a personal copy of the workbook file. This is preferable to a situation in which multiple users access a shared copy.

# Data Collection Toolkit Technical Reference

## Introduction

This topic describes Financial Analyzer API calls that are used by the routines defined in the macro module of the sample workbook template.

## Financial Analyzer API calls

The following table describes the API call that attaches the Financial Analyzer code and shared databases.

| Characteristic | Description |
|---|---|
| Routine name | OFA.EXT.INIT |
| Purpose | Runs the Financial Analyzer startup routine. Attaches code databases and populated temporary catalogs. Attaches the shared databases and establishes permit security based on the operating system user id. |

| Characteristic | Description |
|---|---|
| Input | Blank |
| | Path to the OFASYSCF.CFG file |
| Returns | |

The following table describes the API call that checks the Task Queue for any waiting task for a particular user.

| Characteristic | Description |
|---|---|
| Routine name | TK.CHK.UNPROC |
| Description: | This routine takes as input an internal Financial Analyzer user name and then uses it to limit TK.PROP value USER. It then checks the TK.CATALOG for TK.PROP value STATUS of WAITING or IN PROGRESS. |
| Input: | Financial Analyzer internal user name (i.e., 'AA' for super user) |
| Returns: | YES — Tasks are waiting to be processed for this user |
| | NO — No tasks are waiting |

The following table describes the API call that runs a solve definition on a particular financial data item.

| Characteristic | Description |
|---|---|
| Routine name: | SO.RUN.DFN |
| Description: | This routine sets the status of a financial data item using user defined valuesets and runs a solve definition of that financial data item. |
| Input: | Solve definition name (SO.ENTRY) |
| | Multiline text variable containing valueset names with which to limit the financial data item's dimensions |
| Returns: | YES — If successful |
| | NO — If unsuccessful |

The following table describes the API call that submits data to the shared database.

| Characteristic | Description |
|---|---|
| Routine name: | SB.DATA.SHR |
| Description | This routine sets the status of data for the financial data item using user defined valuesets. It also submits data for the financial data item to the task queue to update the shared database |
| Input | Financial Analyzer financial data item |
| | Multiline text variable containing valueset names with which to limit the financial data item's dimensions |
| Returns | YES — If successful |
| | NO — If unsuccessful |

# 23

# Data Loaders

## Chapter summary

This chapter introduces Financial Analyzer's data loader feature and provides reference material and examples to help you create your own data loader programs.

## Who should read this chapter

Individuals who create and run a data loader program for loading data into Financial Analyzer should read this chapter.

## List of topics

This chapter includes the following topics:

- About the Data Loader Feature
- Structural Metadata and Express Database Objects
- Guidelines for Data Files
- Sample Data Files

# About the Data Loader Feature

## Definition: Data Loader feature

The data loader feature uses Oracle Express Administrator to create programs that load information and data into your personal and shared databases.

You can define programs that perform the following tasks:

- Load values into dimensions and related dimension metadata objects
- Load information to structure hierarchies and attributes
- Load data into financial data items

## Process for creating a Data Loader program

You follow these general steps to create a data loader program.

1. In Financial Analyzer, from the Maintain menu, choose **Data Loaders** and then choose **Create**. This opens Oracle Express Administrator.

2. In Oracle Express Administrator, from the File menu, you choose **Import**. This opens the Import Text Data dialog box.

3. You specify the path and file name of the data file that the data loader program will access.

4. You specify whether the data file uses character delimited fields or fixed length fields.

5. You specify the Express database or metadata object into which the information in each field will be loaded.

6. You specify the appropriate settings for each dimension, variable, or relation information that you will load.

7. You specify a name for the data loader program that you are creating.

8. When you have created all the data loader programs that you need, you exit Oracle Express Administrator.

9. You run the data loader that you created.

## Related information

For more information about creating data loader programs, search for the following topic in the Financial Analyzer Help system: "Creating a Data Loader."

# Structural Metadata and Express Database Objects

## Introduction

When you create a data loader program to load values into dimensions, hierarchies, attributes, or financial data items, your program must populate the Express database and metadata objects that are related to each type of Financial Analyzer structure.

**Note:** All dimensions, hierarchies, attributes, and financial data items must be defined using the Financial Analyzer user interface. You cannot use the data loader feature to create these structures.

## Express database objects associated with Financial Analyzer structures

When you create Financial Analyzer dimensions, attributes, and financial data items, they are stored in your database as Express objects. When you create a data loader program, you must specify the Express object or objects that will store the information you are loading. The Oracle Express Administrator Database Browser displays the Express database and metadata objects that are related to the Financial Analyzer structures in your personal database.

The following topics provide information about the Express objects that are associated with each type of Financial Analyzer structure and show an example of how each would appear in the Database Browser.

### Dimensions

A Financial Analyzer dimension is stored as an Express dimension. This object stores values that you load into the dimension.

You can view a list of all of the dimensions in your personal database by clicking on the *Expand* icon next to the **Dimension** label in the Database Browser. The object name and description for each dimension appear in the Browser window.

**Example:** The Express dimension object for a sample dimension called Example would appear as follows.

 Example            Example

**Note:** When you create a dimension in Financial Analyzer, a set of Express metadata objects is defined in addition to the Express dimension object. These metadata objects must also be populated when you load dimension values into a dimension. If you fail to populate the dimension metadata objects, you will not be able to appropriately work with or view data associated with the dimension's values. The metadata objects that you must populate are discussed later in this topic.

### Attributes

A Financial Analyzer attribute is stored as an Express relation.

You can view a list of all of the relations in your personal database by clicking on the *Expand* icon next to the **Relation** label in the Database Browser. The object name (which is created by the system) and description for each relation appear in the Browser window.

**Example:** The Express relation for a sample attribute called Example Attribute 1 would appear as follows.

 .rl.aa97383r            Example Attribute 1

**Note:** You can load information into one-to-many attributes only. You cannot use the data loader feature to load information into many-to-many attributes.

### Financial data items

A Financial Analyzer financial data item is stored as either an Express variable or formula.

**Note:** You can load data into an Express variable but you cannot load data into a formula.

You can view a list of all of the variables in your personal database by clicking on the *Expand* icon next to the **Variable** label in the Database Browser. The object name and description for each variable appear in the Browser window.

**Example:** The Express variable for a sample financial data item called Example FDI 1 would appear as follows.

 **xY** Example.fdi.1          Example FDI 1

## Express metadata objects associated with Financial Analyzer dimensions

When you create a dimension, a set of dimension metadata objects is also created. These objects are displayed when you click on the *Expand* icon next to a dimension in the Express Administrator Database Browser. They store information related to the dimension's values.

### Example

For a sample dimension called Example, the Oracle Express Administrator Database Browser would display the complete set of metadata objects as follows.


Example          Example
  **xY** Exampl.desc
  **xY** Exampl.lbl.row
  **xY** Exampl.lbl.col
  Fmshrel.exampl
  Fmshdim.exampl

The following topics provide information about each dimension metadata object.

### Dimension value name variable

Dimension value names that you load are stored in an Express variable. The variable name is composed of the dimension's object prefix followed by the suffix .desc.

**Example:** The dimension value name variable for the Example dimension would be called Example.desc.

### Row label variable

Row labels for the dimension values that you load are stored in an Express variable. The variable name is composed of the dimension's object prefix followed by the suffix .lbl.row.

**Example:** The row label variable for the Example dimension would be called Example.lbl.row.

### Column label variable

Column labels for the dimension values that you load are stored in an Express variable. The variable name is composed of the dimension's object prefix followed by the suffix .lbl.col.

**Example:** The column label variable for the Example dimension would be called Example.lbl.col.

### Hierarchy relation

The dimension value relationships that make up a hierarchy are stored in a type of Express relation, called a self-relation. In a self-relation the values of a dimension are related to other values of the same dimension. The relation name is composed of a prefix of Fmshrel followed by the dimension's object prefix.

**Example:** The self-relation for a hierarchy based on the Example dimension would be called Fmshrel.example.

### Hierarchy dimension

When you create the first hierarchy based on a particular dimension, an Express hierarchy dimension is defined for the dimension. The values of the hierarchy dimension are the internal system names of all hierarchies that are based on the dimension. The dimension name is composed of a prefix of Fmshdim followed by the dimension's object prefix.

**Note:** This object is not used in the creation of data loader programs.

**Example:** The hierarchy dimension associated with the Example dimension would be called Fmshdim.example.

# Guidelines for Data Files

## Introduction

It is important that you check your data files to be sure that they adhere to the following guidelines. These guidelines ensure that you will be able to appropriately view and work with your financial data after you have loaded it.

- The first character in a dimension value must be an alpha character.

  **Note:** You can use the **Replace** option in the Field Modifications box of the appropriate Properties dialog box to replace non-alpha characters that are present in your data files.

- Do not include any of the following characters as part of a dimension value.

  **Note:** You can use the **Replace** option in the Field Modifications box of the appropriate Properties dialog box to replace illegal characters that are present in your data files with legal ones.

  `  (single quotation mark)
  ~  (tilde)
  !  (exclamation point)
  @  ("at" sign)
  #  (pound sign)
  $  (dollar sign)
  %  (percent sign)
  ^  (caret)
  &  (ampersand)
  *  (asterisk)
     (blank space)
  (  (left parenthesis)
  )  (right parenthesis)
  –  (dash)
  =  (equal sign)
  +  (plus sign)
  \  (back slash)
  |  (vertical bar)
  [  (left bracket)
  ]  (right bracket)
  {  (left brace)
  }  (right brace)
  ;  (semicolon)

:   (colon)
"   (double quotation marks)
,   (comma)
<   (left angle bracket)
>   (right angle bracket)
/   (forward slash)
?   (question mark)

- The length of a dimension value cannot exceed the column width specified in the dimension's definition. If the value exceeds the specified width, the value is truncated.

    **Note:** In order to fix this type of problem, you must edit the data file and modify any dimension values that exceed the specified length, or you must delete the dimension and redefine it with a column width that will accommodate the length of your dimension values.

- A dimension value cannot contain any lowercase letters. All letters must be in uppercase.

    **Note:** The **Uppercase** option is preselected in the Field Modifications box in the appropriate dialog boxes so that you always load dimension values in uppercase letters.

- Do not add dimension values to the Time or Yr dimensions using a data loader program; only add values to these dimensions through the Time maintenance feature of the Financial Analyzer user interface.

    **Note:** If your data file references values of the Time or Yr dimensions, be sure that you select the **Match the dimension value** option in the Dimension Properties dialog box so that you do not overwrite any values of those dimensions.

- No value in a hierarchy can be designated as its own parent.

    **Note:** You must manually edit the data file to correct this type of problem.

## Correcting file problems

In some cases you have to edit your data file to correct problems; in other cases you can set up your data loader program to correct problems as you load the data in the file.

# Sample Data Files

## About the sample data files

This topic contains two sample data files, one that loads information into Express database and metadata objects, and one that loads financial data into a financial data item. Both files have fixed-length fields.

## FIle to load information into Express database and metadata objects

In this example, the data file loads values into the Express database and metadata objects associated with the Organization dimension. The Oracle Express Administrator Database Browser displays information for the Express dimension objects and for the Express variable that stores the Actual financial data item.

**Note:** These are the objects that you drag from the Database Browser window to the Express Object column in the Import Text Dialog box when you create the data loader program for this sample data file.

### Dimension name and description

The following is the name and description of the dimension into which dimension values will be loaded.



### Dimension value name variable

The following is the dimension value name variable into which dimension value names will be loaded.



### Row label variable

The following is the row label variable into which dimension value row labels will be loaded.

### Column label variable

The following is the column label variable into which dimension value column labels will be loaded.


Org.lbl.col

### Self-relation

The following is the self-relation into which the parent and child relationships between values of the Org dimension, which create the structure of a hierarchy, will be loaded.


Fmshrel.org

### One-to-many relation

The following is the name and description of the relation into which the one-to-many relationships between values of the Org dimension and another Financial Analyzer dimension, which create the structure of an attribute, will be loaded.


.rl.aa62485r          Org Type for Each Org

### Sample data file

The following is the sample data file.

| Dimension Value | Dimension Value Name | Dimension Value Row Label | Dimension Value Column Label | Hierarchy Relation | Attribute Relation |
|---|---|---|---|---|---|
| C01100 | 01100-Resource Rollup | Resource Rollup | Resource Rollup | C01PT | NA |
| C01110 | 01110-Facilities Resources | Facilities Resources | Facilities | C01100 | GANDA |
| C01120 | 01120-Machine Resources | Machine Resources | Machine | C01100 | GANDA |

| Dimension Value | Dimension Value Name | Dimension Value Row Label | Dimension Value Column Label | Hierarchy Relation | Attribute Relation |
|---|---|---|---|---|---|
| C01130 | 01130-Comp and Comm Resources | Comp and Comm Resources | Comp & Comm | C01400 | GANDA |
| C01400 | 01400-Sales Rollup | Sales Rollup | Sales Rollup | C01PT | NA |

## File to load financial data into a financial data item

In this example, the data file references the values in the Express database associated with the Organization, Line, Product, and Time dimensions. It then loads financial data into a financial data item called Actuals.

**Note:** These are the objects that you drag from the Database Browser window to the Express Object column in the Import Text dialog box when you create the data loader program for this sample data file.

The Oracle Express Administrator Database Browser displays information for the Express dimension objects and for the Express variable that stores the Actuals financial data item.

### Object name and description: Organization dimension

The following is the object name and description of the Organization dimension, which is referenced when data is loaded into the Actuals financial data item.



### Object name and description: Line dimension

The following is the object name and description of the Line dimension, which is referenced when data is loaded into the Actuals financial data item.

### Object name and description: Product dimension

The following is the object name and description of the Product dimension, which is referenced when data is loaded into the Actuals financial data item.

 Prod                Product

### Object name and description: Time dimension

The following is the object name and description of the Time dimension, which is referenced when data is loaded into the Actuals financial data item.

 Time                Time

### Object name and description: Actuals variable

The following is the object name and description of the Actuals variable, into which financial data for the Actuals financial data item will be loaded.

 Actual                Actuals

### Sample data file

The following is the sample data file.

| Organization Dimension Values | Line Dimension Values | Product Dimension Values | Time Dimension Values | Actuals Data Values |
|---|---|---|---|---|
| C01100 | A6100 | PPT | JAN00 | 2207272.65 |
| C01100 | A6100 | PPT | FEB00 | 2382589.36 |
| C01100 | A6100 | PPT | JAN00 | 502889.92 |
| C01100 | A6100 | PPT | FEB00 | 542832.88 |

# Glossary

**ACT–BUD variance**

In formulas, ACT–BUD variance means the positive variance is displayed when actual is greater than budget. Typically, if you are defining a revenue line item, you should select the calculation ACT–BUD so that a positive number is displayed if actual data is greater than budget data.

***Add* button**

Button appearing on the Selector dialog box that enables you to add selected items to the *Selected* box.



**aggregation types**

The following aggregation types are supported:

- **add month into quarters** — Data for each month is added into quarterly totals. Used for line items on income statements.

- **first month only into quarter** — Only the first month of the quarter is used in quarterly totals, or only the first month of the year is used in yearly totals. Used for line items on cash flow statements.

- **last month only into quarter** — Only the last month of the quarter is used in quarterly totals, or only the last month of the year is used in yearly totals. Used for line items on balance sheets.

- **average months into quarter** — Values are averaged over the quarter or over the year. Used for line items such as Head Count.

- **average across time and org** — Values are averaged over all organizations and over the quarter of the year. Used for line items such as Unit Price.

- **recalculate quarter** — Values are recalculated at the end of the quarter or year, using the line item equation. Used for line items such as Return on Sales, which represents a ratio.

- **do not aggregate** — Values are removed from status before any rollups or worksheet spread operations are performed.

### Aitkens delta-squared solution method

A solution method in which the first two of every three iterations over a block of simultaneous equations are solved using the values from the previous iteration, and the results are tested for convergence and divergence. In every third iteration, the results are obtained not by solving the equations, but by making a next-guess calculation. This calculation uses the results of the previous three iterations. The results of the guesses are not tested for convergence and divergence, and the solution always continues to the next iteration.

### area graph

A graph that emphasizes trends in data. While similar to a line graph, an area graph highlights the amount of change, not the rate of change.

### asymmetric combination

A set of database objects that enables you to customize the layout of a report. An asymmetric combination joins the values of two dimensions so that you can juxtapose values in a way that lets you compare and contrast them.

### attribute

A database object that links or relates the values of two dimensions. For example, you might define an attribute that relates the Sales District dimension to the Region dimension so that you can select data for sales districts according to region.

### auto redisplay feature

An option on the Graph, Report, and Worksheet menus. When you select this option, your report, graph, or worksheet is automatically redisplayed when you make changes to the format or data in the document.

### axis title

A label that you can assign to the X-, Y-, or Y2-axis of a graph to provide information about the data represented by that axis.

**bar graph**

A graph that compares one or more data series. Each data point is represented by a single bar. You can orient a bar graph either vertically or horizontally.

**BUD–ACT variance**

In formulas, BUD–ACT variance means a positive variance is displayed when budget is greater than actual. Typically, if you are defining an expense line item, you should select the calculation BUD–ACT so that a negative number is displayed if Actuals data is greater than budget data.

***Cancel* button**

A button located to the left of the edit bar which, when chosen, clears all text from the bar.



**clustered bar graph**

A graph that compares data for two or more data series. Each data series is represented by bars of the same color. You can orient a clustered bar graph either vertically or horizontally.

**current dimension**

The dimension from which you are selecting values. The current dimension is the dimension that you specified in the Dimension box of the Selector dialog box. Choices that you make and actions that you take in lower-level dialog boxes ultimately affect this dimension by selecting values from it to include in a document.

**current object**

The object upon which the next specified action takes place. Generally, the current object is the most recently selected one. However, if you use a highlighter button to highlight a group of objects, such as data cells in a column, the first object in the group is the current object.

**data marker**

A graphical object that represents data in a graph. For example, the data markers in a bar graph are bars, while in a pie graph they are pie slices.

**data point**

A graphical object that represents the point of intersection of multiple values in a graph.

**DBA library**

If a database object belongs to a DBA library, it means that the object was created by an administrator and cannot be modified by a user.

**decimal data type**

Variables with a decimal data type contain decimal numbers with up to 15 significant digits.

**Defined by DBA option**

If a dimension has the Defined by option set to DBA for hierarchies, models, or relationships, that dimension can be used only by an administrator in hierarchy, model, or relationship definitions.

**Defined by Everyone option**

If a dimension has the Defined by option set to EveryOne for hierarchies, models, or relationships, that dimension can be used by any user in hierarchy, model, or relationship definitions.

**Defined by No One option**

If a dimension has the Defined by option set to NoOne for hierarchies, models, or relationships, that dimension cannot be used in any hierarchy, model, or relationship definition.

**dimension**

A database object used to organize and index the data stored in a variable. Dimensions answer the following questions about data: "What?" "When?" and "Where?" For example, a variable called Units Sold might be associated with the dimensions Product, Month, and District. In this case, Units Sold describes the number of products sold during specific months within specific districts.

**dimension label**

A text label that displays the name of the dimension associated with an element of a report, graph, or worksheet. For example, the data markers in a graph's legend contain dimension labels that show what data each data marker represents. Dimension labels can be short, which means that they display the object name of a

dimension, or user-specified, which means that they display a label that you typed using the Dimension Labels option on the Graph, Report, or Worksheet menus.

**dimension tile panel**

A set of tiles in a graph, report, or worksheet.
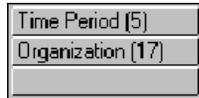


**dimension values**

Elements that make up a dimension. For example, the dimension values of a Product dimension might include Tents, Canoes, Rackets, and Sportswear.

**draft quality printouts**

You can print reports in either final quality or draft quality mode. Both modes print out all data included in your report. Final quality printouts reflect all formatting you have applied to the body of your report as well as any customized headers and footers you add to your report. Draft quality reports include customized headers and footers as well as row and column labels, but they do not reflect any customized formatting in the body of the report.

Because draft printouts use a default draft font and do not include customized formatting they can print faster than final quality printouts.

You cannot print drafts of graphs or worksheets.

***Drill* button**

Opens the Drill dialog box, which enables you to move up or down through the levels of aggregated data in a report, graph, or worksheet.



**drill icons**

Icons on which you click to move up or down through the levels of aggregated data in a report, graph, or worksheet. There are two drill icons:

The following icon expands the list of related financial data items, enabling you to view more detailed levels of aggregated data.

+

The following icon collapses the list of related financial data items, enabling you to view higher levels of aggregated data.

–

**edge**

The position in a report or worksheet along which a dimension or financial data item is located. The report edges correspond to the sides of a three-dimensional data slice.
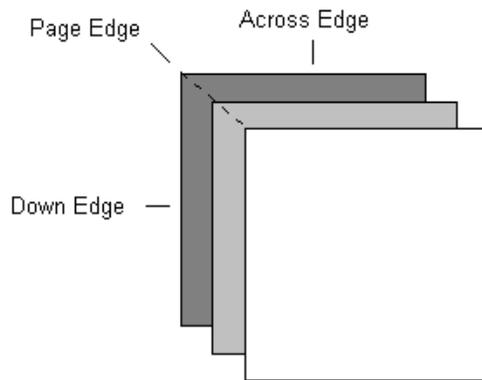


**edit bar**

An element of the document area that enables you to edit the text associated with components and options in graphs, reports, and worksheets.

**Ellipsis button**

A button that opens a Choice List dialog box, which provides a list of values from which you can make one or more selections.

**Enter button**

A button located to the left of the edit bar which, when chosen, applies the text in the box to a selected graph, report, or worksheet option.

**financial data item**

A database object that is made up of either a variable, or a variable and a formula. For example, a financial data item called "Actuals" would be a variable, while a financial data item called "Actuals Variance" would be made up of a variable (Actuals) and a formula that calculates a variance.

**fitline**

Represents a new series of data that is statistically based on an original series. Fitlines, also called trend lines, illustrate how original data series are changed by exponential, linear, or logarithmic calculations. A fitline answers the question, "What, mathematically, can we say about the original series?"

**folder**

An object in which you can store documents such as reports and graphs. You can create a new folder and add documents to it by choosing the Maintain Folders option from the Tools menu.

**footnote**

Text that you can include at the bottom of a graph, report, or worksheet to annotate that document. Footnotes appear on your screen and on printouts of a document.

**Formula Tools button**

A button located to the left of the edit bar which, when chosen, invokes the Formula Tools dialog box. You can then use the formula tools to create a formula to be used in the current report.

$f$

**Gauss-Seidel solution method**

A solution method in which equations in a simultaneous block are solved in each iteration over the block. The results are tested for convergence and divergence in each iteration.

**graph components**

The basic structural elements of a graph, such as the X- and Y-axes in line and bar graphs, or the pie slices in pie graphs.

**graph options**

Elements, such as a title or legend, that provide additional information about the data represented in a graph. Graph options can be displayed or hidden using commands on the Graph menu.

**grids**

Lines that help to visually separate the data cells and labels in a report or worksheet, or that help to relate data markers and data points to axis tick labels in a graph.

**growing data**

A worksheet calculation method that enables you to augment or decrement the values of financial data items in a range of cells over a specified amount of time by a constant amount or by a percentage.

**highlighter buttons**

Small rectangular graphical objects that cause specific areas of a report or worksheet to become highlighted when you click on them. Highlighter buttons produce highlighted areas in the following ways:

- Clicking on the button to the right of a row label highlights that row of data.

- Clicking on the button beneath a column label highlights that column of data.

- Clicking on the square button at the intersection of the first row and first column highlights all rows and columns of data on the current page.

Following is an illustration of the highlighter buttons.



### increasing data

A worksheet calculation method that enables you to augment or decrement the values of specific financial data items for specific time periods by a constant amount or by a percentage.

### integer data type

Variables with an integer data type contain whole numbers with values between -2.14 billion and +2.14 billion.

### legend

A graphical key that displays a graph's data markers and the dimension labels for the data that the markers represent.

### library

An ownership designation associated with a database object, which specifies who created the object and, therefore, who is permitted to modify or delete it. Objects can have the following library designations:

- **Personal** — An object that you created and which you can modify or delete.

- **DBA** — An object that your administrator created, which only that administrator can modify or delete.

- **System** — An object that is delivered with the software, which no user or administrator can modify or delete.

### line graph

A graph that depicts trends. Each data point is represented by a point on the graph. When the points are connected by lines, trends become visible.

### major gridlines

Vertical and horizontal lines that you can display in a report, graph, or worksheet to visually separate data. Major gridlines visually segment the report, graph, or worksheet area into larger areas than do minor gridlines.

### Many-to-Many attribute

A relationship between one or more values of one base dimension with one or more values of a second base dimension. For example, if you have a Many-to-Many attribute definition where the first base dimension is Organization and the second base dimension is Line Item, then a single organization can be related to several line items, and a single line item can be related to several organizations.

### metadata

Data that describes other data. An example of metadata is a variable that lists the names of levels in a hierarchy or that holds the number of decimal places to be used for displaying data. Client applications use metadata when displaying multidimensional data in graphs, reports, tables, and so on.

### minor gridlines

Vertical and horizontal lines that you can display in a report, graph, or worksheet to visually separate data. Minor gridlines visually segment the report, graph, or worksheet area into smaller areas than do major gridlines.

### model

A set of interrelated equations for calculating data.

### One-to-Many attribute

A relationship where one or more values of a base dimension are related to a single value of an aggregate dimension. For example, if you have a One-to-Many attribute definition where the base dimension is Organization and the aggregate dimension is Level, each organization can be related to only a single level.

### Oracle GL library

If a database object belongs to an Oracle GL library, it means that the object was created by importing data from Oracle General Ledger. Users can add and move values that belong to Oracle GL libraries, but they cannot rename or delete them.

### page control

A graphical element that enables you to page through a graph, report, or worksheet.



**Tip:** To quickly page through an open report or worksheet, select the paging dimension by clicking on it and press ALT+PAGE UP or ALT+PAGE DOWN.

### personal database

Personal databases are used to store objects, and on some types of workstations, financial data. Objects include dimensions, financial data items, attributes, and hierarchies, as well as documents such as reports, worksheets and graphs.

### personal library

If a database object belongs to a personal library, it means that the object was created by the workstation user and can be modified.

### pie slice feelers

Graphical lines that help you annotate a pie graph by connecting a pie slice label to a pie slice.

### qualified data reference

In reports, qualified data references (QDRs) are used to describe specific cells that are referenced by one or more dimensions. For example, a QDR can be used to reference the cell that represents the Total Assets line item for the year 1996 for the East organization.

### Redisplay button

Lets you redisplay a report, graph, or worksheet after you have modified it.

### *Remove* **button**

Button appearing on the Selector dialog box that enables you to remove selected items from the *Selected* box.



### report components

The basic structural elements of a report, such as its rows and columns.

### report options

Structural elements, such as titles or column headings, that organize the data represented in a report. Report options can be displayed or hidden using commands on the Report menu.

### scroll bars

Graphical elements of a report or worksheet that enable you to view information that currently does not fit into the window display.
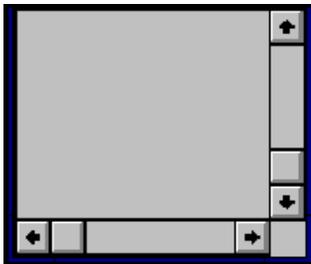


### selection tools

A set of tools that provide shortcut methods for selecting the values that you want to work with in a document.

### shared database

The shared database contains financial data and objects that are shared by all users. Objects include dimensions, financial data items, attributes, and hierarchies, as well as documents such as reports, graphs, worksheets and data entry forms. Shared databases are maintained by administrators.

**shortdecimal data type**

Variables with a shortdecimal data type contain decimal numbers with up to 7 significant digits.

**shortinteger data type**

Variables with a shortinteger data type contain whole numbers with values between -32768 and +32768.

**solve definition**

A set of information used to calculate new values for financial data items. This information includes the variable for which new values are to be calculated, the model to be used in the calculation, the dimensions of the variable, and any hierarchies associated with the dimensions. When you run a solve definition, the model is solved for the variable referenced in the definition.

**spreading data**

A worksheet calculation method that enables you to augment or decrement the values of descendants in a hierarchy by entering a value for a parent value in the hierarchy and modifying the descendants based on their relationship with the parent.

**text data type**

Variables with a text data type can contain multiple lines of alphanumeric text.

**text dimension**

A dimension whose values can contain characters in both upper and lower case. The length of a text dimension's values is determined by the Width option on the Maintain Dimension dialog box.

**thick client**

A client is considered thick if the personal database and Express Server are installed on the PC and all processing takes place on the PC.

**thin client**

A client is considered thin if the personal database and Express Server are installed on the server and all processing occurs on the server.

**tick labels**

Text or numbers, located along a graph's axes, that describe the data presented in a graph.

**tick marks**

Short line segments, located on a graph's axes, that denote increments of data. Major tick marks indicate primary levels of gradation, while minor tick marks indicate secondary levels. When working with a bar, line, or scatter graph, you can choose to include major tick marks, minor tick marks, or both, to make the graph's data easier to interpret.
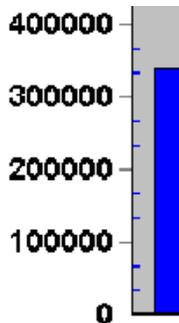


**tile**

A graphical element of a report, graph, or worksheet that displays the name of a dimension whose data appears in that document.



A tile's location in a document indicates the position of the dimension it represents. For example:

- Tiles located above and to the left of a report represent dimensions in the page position.

- Tiles located above and to the right of a report represent dimensions in the across position.

- Tiles located at the bottom of a report represent dimensions in the down position.

Tiles contain a number in parentheses beside the dimension name. This number indicates how many values have been selected for the dimension.

You can manipulate the data in a document by dragging one or more tiles to new locations in the document. This action changes the position of the tiles' related dimensions.

**Time dimension**

A dimension whose values represent time periods. A time period can be a month, quarter, or year. The length of the Time dimension's values is determined by the Width option on the Maintain Dimension dialog box.

**variable**

A database object that holds raw data. Data can be numerical, such as sales or expense data, or textual, such as descriptive labels for products.

**worksheet components**

The basic structural elements of a worksheet, such as its rows and columns.

**worksheet options**

Structural elements, such as titles or column headings, that provide additional information about the data represented in a worksheet. Worksheet options can be displayed or hidden using commands on the Worksheet menu.

**Y2-axis**

A secondary vertical axis that can display:

■ A numeric scale that is different from that of the Y-axis, which can help you compare values that belong to different ranges.

■ A numeric scale that is the same as that of the Y-axis, which can be used to make a graph more easily readable.

# Index