# Integrating Oracle® Financial Analyzer Release 6.2 with Oracle General Ledger Release 11

Release 1.0

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Integrating Oracle Financial Analyzer Release 6.2 with Oracle General Ledger Release 11, Release 1.0

Part No. A63464-01

# Contents

# About This Manual

This manual describes how to integrate Oracle Financial Analyzer (hereinafter referred to as "Financial Analyzer") with Oracle General Ledger (hereinafter referred to as "General Ledger"). It explains how to set up both products for integration during installation, and how to prepare, transfer, and load data from Oracle General Ledger into Oracle Financial Analyzer.

This manual is intended for database administrators and information services personnel who are familiar with both General Ledger and Financial Analyzer.

We recommend that you work with Oracle Consulting to set up your integration and map data from General Ledger to Financial Analyzer (see Chapters 1, 2, and 3 of this manual). Once the setup is complete, you will be able to transfer data between the two applications as often as you wish (see Chapters 4, 5, and 6 of this manual).

The final chapter of this manual includes a technical overview of the integration process, a description of the flow of the data load process, a discussion of individual issues to consider during implementation, and a list of frequently asked questions with answers.

# General Ledger and Financial Analyzer Documentation

This manual is made up of seven chapters and a glossary. Chapter One provides an overview of the basic concepts about integrating Oracle General Ledger with Oracle Financial Analyzer. Each remaining chapter discusses a different aspect of the integration process. Before you delve into any specific area, read the introductory chapter to acquaint yourself with the basic concepts.

## Related Documentation

This manual is part of a comprehensive document set for both General Ledger and Financial Analyzer. These documents include:

- *Oracle General Ledger User's Guide, Release 11* — Provides conceptual and procedural information for Oracle General Ledger users.

- *Oracle Financial Analyzer User's Guide* — Provides conceptual and procedural information for Budget workstation users and Analyst workstation users.

- Oracle General Ledger On-line Help — Provides procedural and reference information for Oracle General Ledger.

- Oracle Financial Analyzer On-line Help — Provides procedural and reference information for both system administrators and users.

# Conventions

This manual uses a set of terms, symbols, and typographic conventions to categorize specific information. Familiarity with these conventions will help you use this document more effectively.

The following icons are used in this manual.

| Icon | Meaning |
|------|---------|
| | A procedure that you should follow to complete a task |
| | References to other manuals or other sections of this manual |
| | References to the Help system |

You will find the following text conventions in this manual.

| Convention | Usage |
|------------|-------|
| UPPERCASE text | Indicates directory names, file names, operating system commands, Express commands and objects, and acronyms. |
| Courier text | Indicates examples and anything that you must type exactly as it appears. For example, if you are asked to type show version, you would type all of the characters shown in Courier font exactly as they are printed. |
| **boldface** text | Indicates menu items, command buttons, options, and field names. |
| *italic* text | Indicates variables, including variable text (see Glossary). Italic type is also used for emphasis and for titles of documents. |

# Mouse Usage

This manual includes procedures in which you use both mouse buttons. 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, you will need to use the opposite button when following the procedures in this manual.

For definitions of basic mouse terms, refer to the *Microsoft Windows User's Guide.*

# Keyboard Formats

All key names are shown using small uppercase letters. For example, the Control key is shown as CTRL. The UP ARROW, DOWN ARROW, LEFT ARROW, and RIGHT ARROW keys are collectively referred to as the arrow keys.

Key combinations and key sequences appear in the following formats.

| Format | Meaning |
|---|---|
| KEY1+KEY2 | A plus sign (+) between key names means that you are to press and hold down the first key while pressing the second key. For example, "press ALT+TAB" means to press and hold down the ALT key while pressing the TAB key. |
| KEY1, KEY2 | A comma (,) between key names means that you are to press and release the keys one after the other. For example, "press ALT, F, O" means to press and release the ALT key, press and release the F key, then press and release the O key. |

# Chapter 1

# Introduction

This chapter explains how the various components of an Oracle General Ledger relational database are mapped to the multidimensional structures of an Oracle Financial Analyzer application.

# What Is Oracle General Ledger?

Oracle General Ledger is a complete financial management system for recording transactions, maintaining account balances, and creating financial statements.

Companies enter transactions in feeder systems, such as accounts payable, accounts receivable, and payroll, then transfer transaction information to General Ledger to maintain centralized account balances. Companies can also enter transactions directly into General Ledger, using a variety of tools such as recurring transactions and automatic allocations. After posting transactions in General Ledger to update account balances, users can view their account balances either on-line or in reports, using General Ledger's Financial Statement Generator.

# What Is Oracle Financial Analyzer?

Oracle Financial Analyzer uses a multidimensional data model which is ideal for on-line analysis. It provides a complete set of tools for planning, analyzing, and reporting corporate financial data. With the Express multidimensional database at its core, Financial Analyzer lets you set up a customized system that reflects your corporation's unique organizational

structure and facilitates the management of your financial data at all business levels. It handles organizational consolidations across multiple hierarchies and automatically performs line item and time aggregations.

Financial Analyzer uses dimensions to provide the organization for financial data. A financial data item can have up to 10 dimensions. Each dimension is stored as a separate object in a Financial Analyzer database. The dimension contains a list of values that identify the elements of the dimension. Dimension values not only identify your data, but also provide an easy way to target the data you need for a particular purpose.

When you create a report, graph, or worksheet, you select the values to work with. For example, the figure below illustrates some selections a user might make while working with a financial data item dimensioned by Time, Line, and Org.
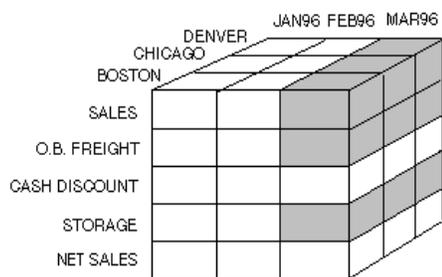


**Data selected**
TIME: MAR96
LINE: SALES, O.B. FREIGHT, STORAGE
ORG: ALL Organizations
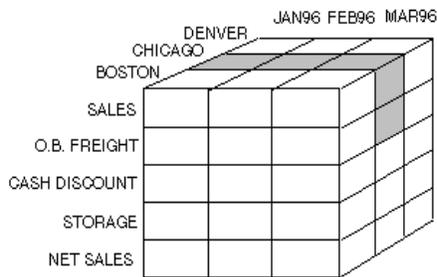
**Data selected**
TIME: JAN96, FEB96, MAR96
LINE: SALES, O.B. FREIGHT
ORG: CHICAGO

Selecting dimension values has no permanent effect on your database. Every dimension has all its values available whenever you start up your database, and you can change the selection at any time as you work with Financial Analyzer.

# Integration Process Flow

The following diagram shows the process flow for integrating Financial Analyzer with General Ledger.

## Integrating Financial Analyzer with General Ledger Process Flow

| Process Step | Description |
|---|---|
| **Install GL and OFA** | The first step in integrating Financial Analyzer with General Ledger is installing both products. Refer to chapter 2 for installation guidelines. |
| **Define Meta Data** | Before transferring data from General Ledger to Financial Analyzer, users define Financial Analyzer meta data (such as dimensions and hierarchies) in General Ledger. Refer to Chapter 3 for information on defining meta data. |
| **Extract GL Data to Interface Area** | After defining meta data, users extract data from General Ledger. Users extract data as often as needed, such as every month for actual data and every year for budget data. Refer to Chapter 4 for information on extracting data from General Ledger. |
| **Load Data from Interface Area into OFA** | After extracting data from General Ledger, you can automatically load structures and data into Financial Analyzer. Refer to Chapter 5 for information on loading structures and data into Financial Analyzer. |
| **Solve hierarchies and distribute data** / **Analyze financial data in OFA** | After transferring data from General Ledger to Financial Analyzer, your Super Administrator can solve your hierarchies and distribute structures and data to budget workstations, analyst workstations, and other administrators. |
| **Create budgets in OFA** | Users create or edit budgets in Financial Analyzer. |
| **Submit budgets to Super DBA** | After budgeting is completed, users submit budgets to the Super Administrator. |
| **Refine Budgets** / **Solve Budgets** | Super Administrator solves the submitted budgets. |
| **Write budgets from OFA back to GL** | The Super Administrator exports finalized budgets to an interface area. You can automatically load budget data into General Ledger. Refer to Chapter 6 for information on transferring budgets from Financial Analyzer back to General Ledger. |

Repeat as needed

# Mapping Data from General Ledger to Financial Analyzer

General Ledger uses a relational data model, which is ideal for transaction processing and storing, while Financial Analyzer uses a multidimensional data model, which is ideal for on-line analysis. To take advantage of both models, you must map your General Ledger data into Financial Analyzer metadata.

## Dimensions and Dimension Values

You can automatically create dimensions and dimension values in Financial Analyzer based on your existing segments and segment values in General Ledger. You map your segments and segment values into detail dimensions or summary dimensions for Financial Analyzer.

Dimensions are made up of one or more segments. You set up your dimensions in General Ledger using the Dimension form. When you transfer data into Financial Analyzer, it will automatically create dimensions and dimension values.

When you create detail dimensions, you can map one or more segments to a single dimension. When you map multiple segments to a dimension, Financial Analyzer will group the segment values and descriptions for those segments. Typically this will be done for segments that do not require cross-dimensional analysis. For example, if cost centers are unique to one company in your enterprise, the cost center and company segments would be mapped to a single dimension, because you will not need to analyze cost centers across multiple companies. Their relationship is hierarchical rather than cross-dimensional. During the data transfer, Financial Analyzer selects the detail segment values for the segments you specify in your detail dimensions. Then, you can summarize your financial information in Financial Analyzer. You map your segments and segment values to detail dimensions as follows:

**Oracle General Ledger**

Company - Cost Center - Account - Product   *Segments*

| 01 | 300 | 4000 | 313 | *Segment* |
|----|-----|------|-----|-----------|
|    | 340 | 4130 | 406 | *Values* |
| 02 | 400 | 4240 | 726 | |
|    | 410 | 5170 | 819 | |
|    |     | 5580 |     | |

Org              Line     Product   *Dimensions*

| A01.300 | L4000 | P313 | *Dimension* |
|---------|-------|------|-------------|
| A01.340 | L4130 | P406 | *Values* |
| A02.400 | L4240 | P726 | |
| A02.410 | L5170 | P819 | |
|         | L5580 |      | |

**Oracle Financial Analyzer**
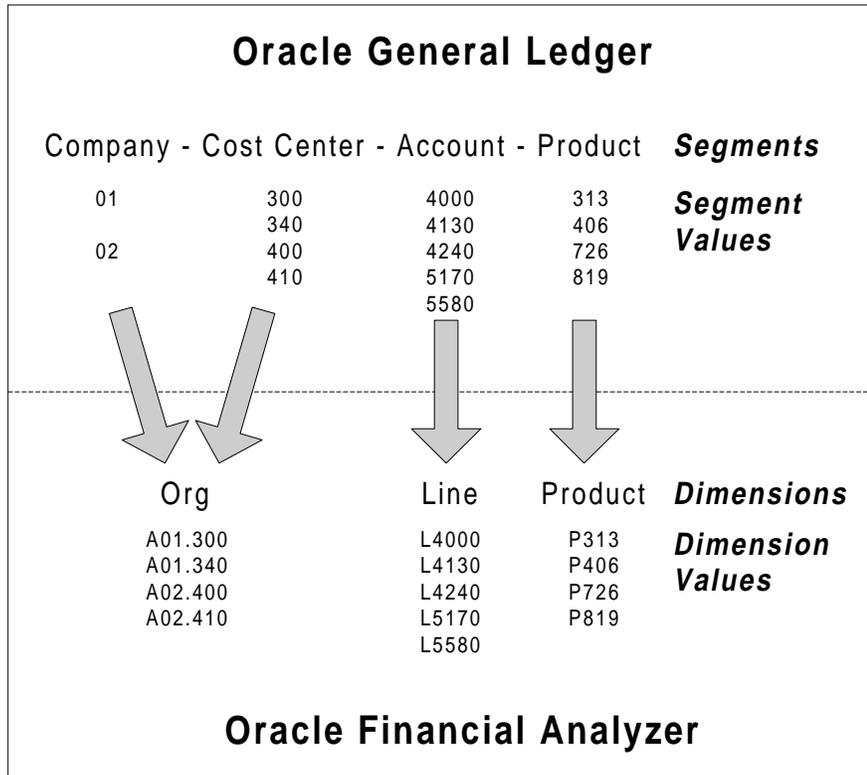
This diagram shows the Account and Product segments mapped to the Line
and Product dimensions. The Company and Cost Center segments are
mapped to a single dimension called Org. Cost Centers 300 and 340 report
into Company 01, and Cost Centers 400 and 410 report into Company 02.

When you create summary dimensions, Financial Analyzer will select the
parent or summary segment values for the segments you specify in your
dimension. Therefore, you can upload financial information into Financial
Analyzer which is already summarized in General Ledger. If you want to
transfer summary financial information into Financial Analyzer, you must
have summary templates defined in General Ledger. You map your
segments and segment values to summary dimensions as follows:

```
┌──────────────────────────────────────────────────────────────────┐
│                     Oracle General Ledger                          │
│                                                                    │
│   Company  -  Cost Center  -  Account  -  Product    Segments      │
│                                                                    │
│   ┌──┐         ┌───┐          ┌────┐       ┌───┐     Segment        │
│   │99│         │999│          │9999│       │999│     Values         │
│   └┬─┘         └┬──┘          └┬───┘       └┬──┘                    │
│    ├─(01)       ├─(300)        ├─(4000)     ├─(313)                 │
│    └─(02)       ├─(340)        ├─(4130)     ├─(406)                 │
│                 ├─(400)        ├─(4240)     ├─(726)                 │
│                 └─(410)        ├─(5170)     └─(819)                 │
│                                └─(5580)                            │
│                                                                    │
│        99          T             D            T      Summary        │
│                 (T=Total)    (D=Detail)   (T=Total)  Template       │
│                                                                    │
│         ▼           ▼            ▼            ▼                      │
│                                                                    │
│     Company   Not mapped to    Line     Not mapped to Dimensions    │
│               a dimension               a dimension                │
│                                                                    │
│      CO99                     L4000                  Dimension      │
│                               L4130                  Values         │
│                               L4240                                │
│                               L5170                                │
│                               L5580                                │
│                                                                    │
│                  Oracle Financial Analyzer                         │
└──────────────────────────────────────────────────────────────────┘
```
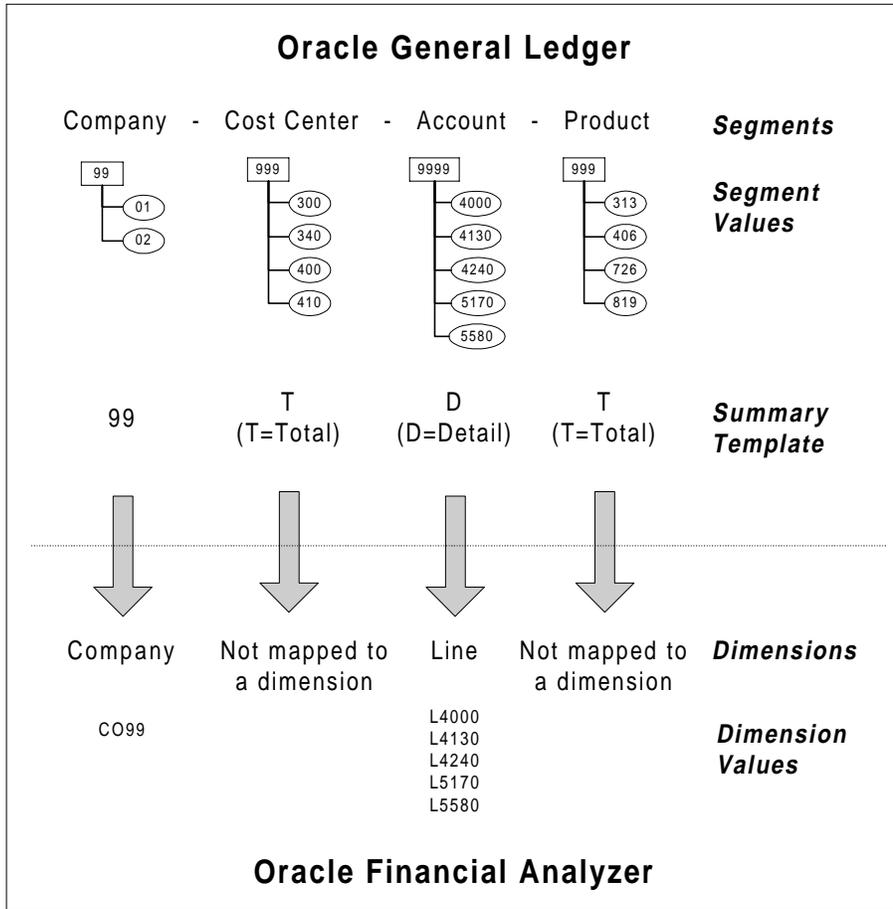
This diagram shows the Company segment mapped to the Company summary dimension, and the Account segment mapped to the Line detail dimension. Notice only the summary level data for the Company segment (Company 99) is loaded into Financial Analyzer. The Cost Center and Product segments are not mapped to any dimensions in Financial Analyzer, so you will not be able to select them for analysis in Financial Analyzer.

# Filters

Financial Analyzer will automatically create a dimension value for each segment value in General Ledger. Or, you can use a filter to limit the number of dimension values Financial Analyzer creates. Filters enable you to include only selected segment values for a specific segment. For example, in the illustration below, the filter [R] is defined to include only accounts 4000 to 4240. In this case, Financial Analyzer would only create the values L4000, L4130, and L4240 for the Line dimension.

## Oracle General Ledger

Company - Cost Center - Account - Product **Segments**

| 01 | 300 | 4000 | | 313 | **Segment** |
| | 340 | 4130 | R | 406 | **Values** |
| 02 | 400 | 4240 | | 726 | |
| | 410 | 5170 | | 819 | |
| | | 5580 | | | |

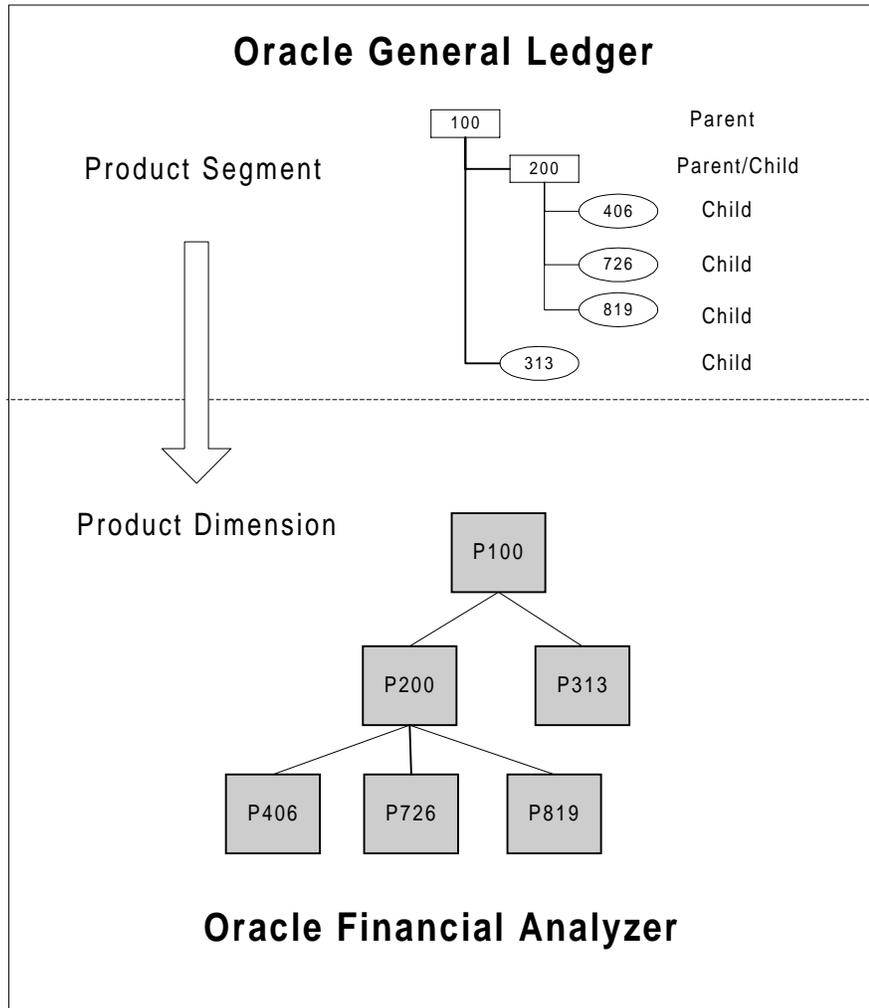| Org | Line | Product | **Dimensions** |
| A01.300 | L4000 | P313 | **Dimension** |
| A01.340 | L4130 | P406 | **Values** |
| A02.400 | L4240 | P726 | |
| A02.410 | | P819 | |

## Oracle Financial Analyzer
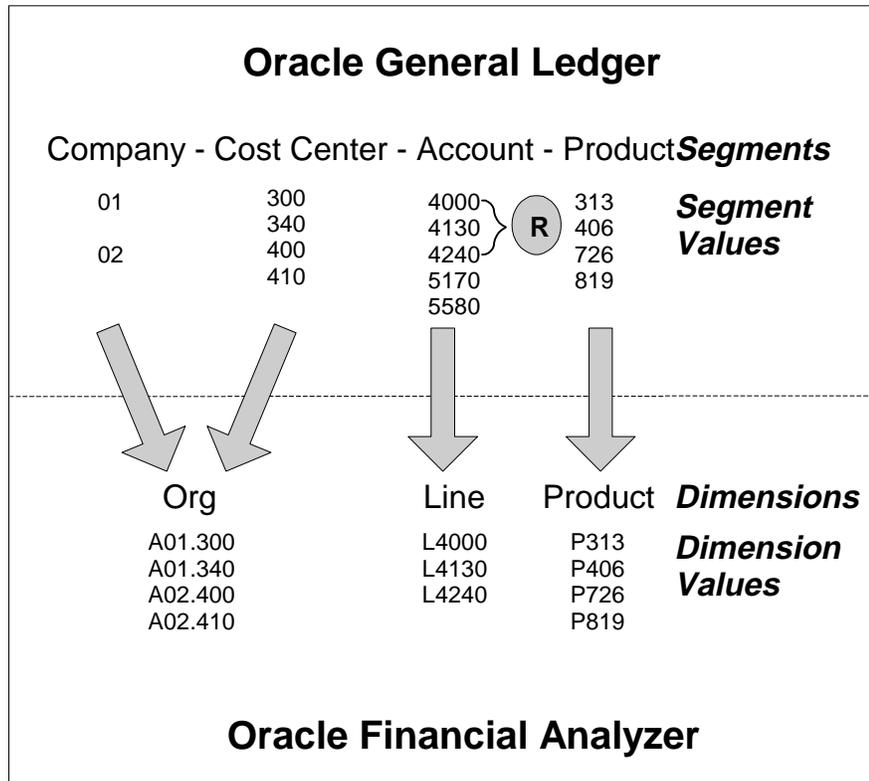
# Time Dimension

You define dimensions by assigning segments, but Financial Analyzer will automatically create a custom GL Time dimension which does not have any assigned segments. Financial Analyzer uses the accounting calendar defined in General Ledger to create the custom GL Time dimension. The following diagram displays the relationship between segments, accounting calendars, and dimensions.
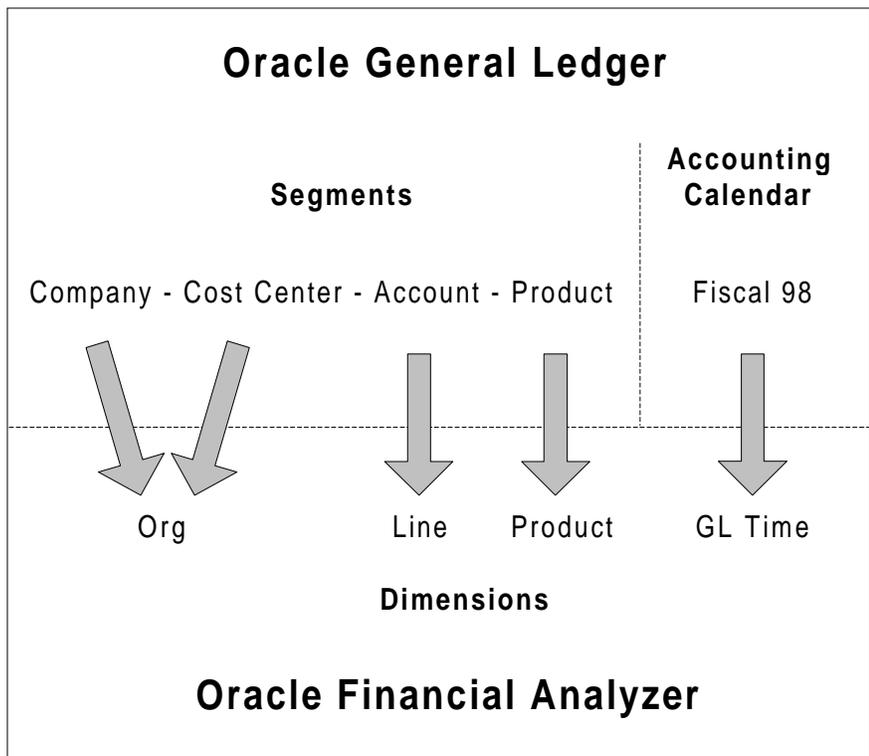
# Hierarchies

You can use the parent and child segment value relationships you have defined in General Ledger to enable summarization and drill down in Financial Analyzer. You decide which dimensions you want to summarize or drill down using the Hierarchy form in General Ledger. When you transfer your data, Financial Analyzer will automatically create your hierarchies.

You can define as many hierarchies as you want. You can even define hierarchies for dimensions to which multiple segments are defined. The illustration above shows a hierarchy defined for the Product dimension, but you could also, for example, define hierarchies for the Org dimension, to which both the Company and Cost Center segments are assigned. The hierarchy order is based on the relationship between Company and Cost Center; that is, cost centers report into companies.

## Oracle General Ledger

Company Segment                    Cost Center Segment



Org Dimension

## Oracle Financial Analyzer
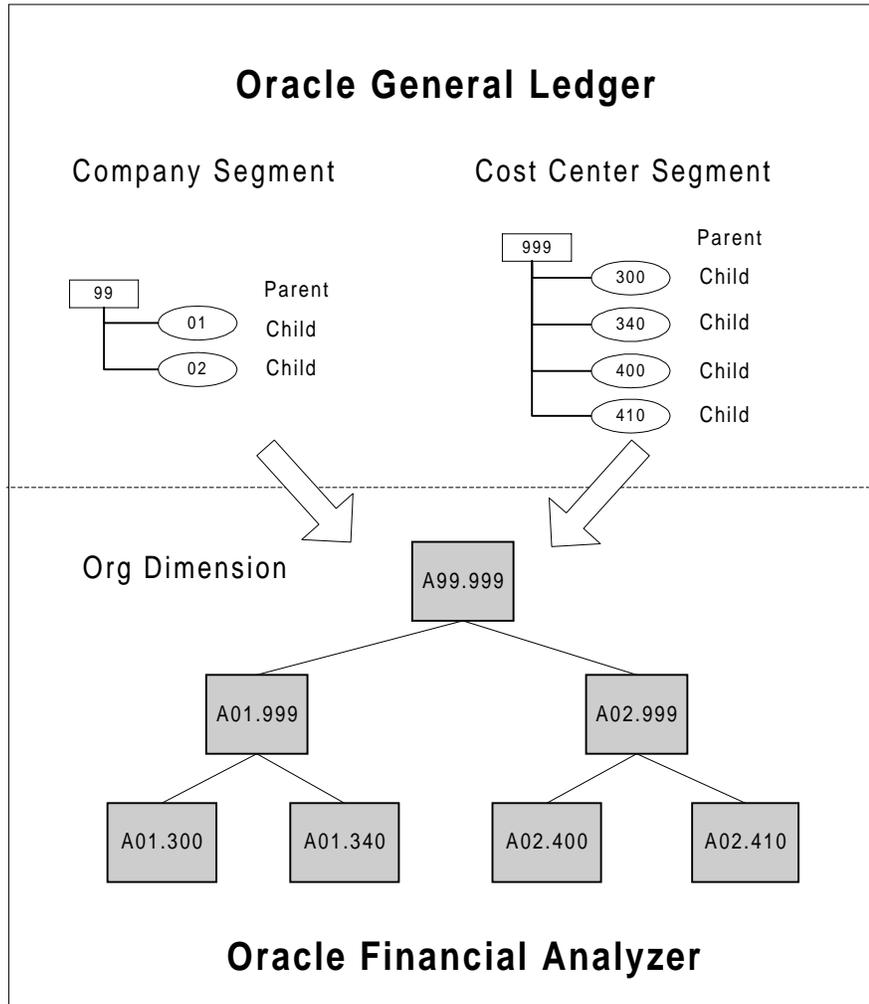
# Financial Data Items

You decide what types of balances you want to transfer to Financial
Analyzer using the Financial Data form in General Ledger. You can choose
from a variety of transfer options, including:

| Transfer Level | Balance Type | Currency Type |
|---|---|---|
| ■ Detail<br>■ Summary | ■ Actual Balances<br>■ Budget Balances<br>■ Encumbrance Balances<br>■ Average Balances<br>   □ End of Day<br>   □ Period-Average-to-Date<br>   □ Quarter-Average-to-Date<br>   □ Year-Average-to-Date | ■ Functional<br>■ Foreign Entered<br>■ Foreign Translated<br>■ Statistical<br>■ Functional and Statistical |

You can create detail or summary financial data items by assigning detail
and summary dimensions. When you transfer balances, Financial Analyzer
will load your financial data according to the level of summarization and
the segment-to-dimension mappings you defined.

You can assign only detail dimensions to detail financial data items.
Financial Analyzer will upload detail segment values and detail financial
data from General Ledger when you use a detail financial data item. Then,
you can summarize your financial information in Financial Analyzer by
solving hierarchies.

You can assign both detail dimensions and summary dimensions to
summary financial data items; however, you must assign at least one
summary dimension to your summary financial data item.

When you use summary financial data items, you can upload financial
information into Financial Analyzer which is already summarized in
General Ledger. Therefore, you will not need to solve hierarchies in
Financial Analyzer to obtain summarized financial information for your
multidimensional analysis. However, you can also solve hierarchies against
your data if you wish to further aggregate your financial information in
Financial Analyzer. If you want to transfer summary financial information

into Financial Analyzer, you must have summary templates defined in
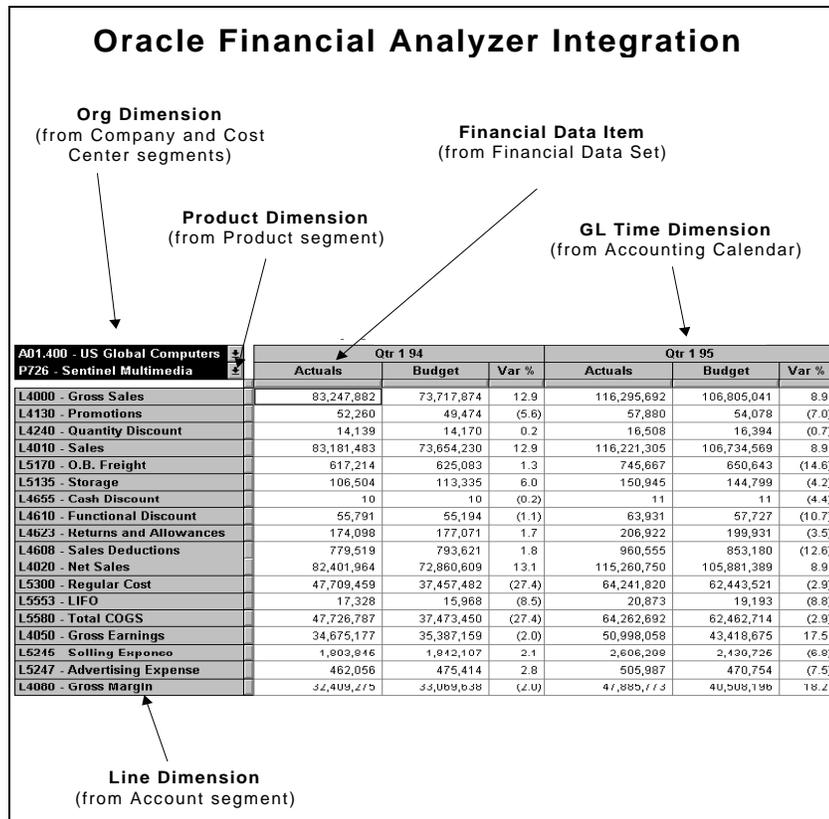General Ledger.
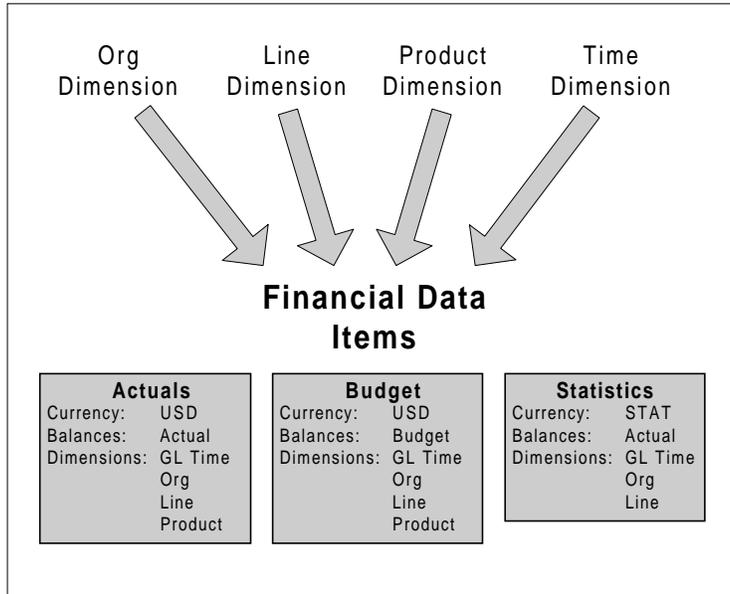


The diagram above illustrates three financial data items named Actuals,
Budget, and Statistics. Actuals is defined by four dimensions—Org, Line,
Product, and GL Time. When you extract actual balances from General
Ledger, Financial Analyzer will load Actuals by mapping the company and
cost center segments into the Org dimension, the account segment into the
Line dimension, etc. The financial data item named Budget is defined with
the same dimensions as Actuals but loads budget balances instead of actual
balances. Finally, Statistics is defined by only three dimensions—Org,
Line, and GL Time. In this case, Financial Analyzer summarizes financial
data across all products for each combination of Org, Line, and Time. You
can load both functional and statistical balances into the same financial data
item, provided that separate account segment values are defined for
statistical values.

# Financial Data Set

You can combine financial data items in a financial data set. When you load financial data into Financial Analyzer, you specify which financial data set you want to load. Only one financial data set is allowed per installation of Financial Analyzer. Financial Analyzer will create the financial data items in your financial data set. Financial Analyzer will automatically create all relevant dimensions, dimension values and hierarchies, and load all appropriate financial data from General Ledger.

The following diagram illustrates the complete integration between General Ledger and Financial Analyzer. The diagram shows the end result of transferring a financial data set with the Actuals and Budget financial data items, and using a Financial Analyzer formula to calculate the Variance% between Actuals and Budget.

## Oracle Financial Analyzer Integration

**Org Dimension**
(from Company and Cost Center segments)

**Financial Data Item**
(from Financial Data Set)

**Product Dimension**
(from Product segment)

**GL Time Dimension**
(from Accounting Calendar)

| A01.400 - US Global Computers | Qtr 1 94 | | | Qtr 1 95 | | |
|---|---|---|---|---|---|---|
| P726 - Sentinel Multimedia | Actuals | Budget | Var % | Actuals | Budget | Var % |
| L4000 - Gross Sales | 83,247,882 | 73,717,874 | 12.9 | 116,295,692 | 106,805,041 | 8.9 |
| L4130 - Promotions | 52,260 | 49,474 | (5.6) | 57,880 | 54,078 | (7.0) |
| L4240 - Quantity Discount | 14,139 | 14,170 | 0.2 | 16,508 | 16,394 | (0.7) |
| L4010 - Sales | 83,181,483 | 73,654,230 | 12.9 | 116,221,305 | 106,734,569 | 8.9 |
| L5170 - O.B. Freight | 617,214 | 625,083 | 1.3 | 745,667 | 650,643 | (14.6) |
| L5135 - Storage | 106,504 | 113,335 | 6.0 | 150,945 | 144,799 | (4.2) |
| L4655 - Cash Discount | 10 | 10 | (0.2) | 11 | 11 | (4.4) |
| L4610 - Functional Discount | 55,791 | 55,194 | (1.1) | 63,931 | 57,727 | (10.7) |
| L4623 - Returns and Allowances | 174,098 | 177,071 | 1.7 | 206,922 | 199,931 | (3.5) |
| L4608 - Sales Deductions | 779,519 | 793,621 | 1.8 | 960,555 | 853,180 | (12.6) |
| L4020 - Net Sales | 82,401,964 | 72,860,609 | 13.1 | 115,260,750 | 105,881,389 | 8.9 |
| L5300 - Regular Cost | 47,709,459 | 37,457,482 | (27.4) | 64,241,820 | 62,443,521 | (2.9) |
| L5553 - LIFO | 17,328 | 15,968 | (8.5) | 20,873 | 19,193 | (8.8) |
| L5580 - Total COGS | 47,726,787 | 37,473,450 | (27.4) | 64,262,692 | 62,462,714 | (2.9) |
| L4050 - Gross Earnings | 34,675,177 | 35,387,159 | (2.0) | 50,998,058 | 43,418,675 | 17.5 |
| L5245 - Selling Expense | 1,903,846 | 1,942,107 | 2.1 | 2,606,209 | 2,430,726 | (6.9) |
| L5247 - Advertising Expense | 462,056 | 475,414 | 2.8 | 505,987 | 470,754 | (7.5) |
| L4080 - Gross Margin | 32,409,275 | 33,069,638 | (2.0) | 47,885,773 | 40,508,195 | 18.2 |

**Line Dimension**
(from Account segment)

# Chapter 2

# Installation

Before integrating Financial Analyzer with General Ledger, you must first install both products and set up the General Ledger concurrent manager.

This chapter gives a brief outline of the installation procedures for both products with special emphasis on those aspects of the installations that are necessary for the integration.

# Installing the Software

You can install General Ledger before or after you install Financial Analyzer.

**To install General Ledger:**

1. Install the appropriate version of General Ledger Release 11 or later for your server platform.

2. Add extraction programs to your General Ledger report security group.

   These extraction programs transfer data from General Ledger to Financial Analyzer. You run these programs using the Submit Request form in General Ledger.

   To add the programs, follow these steps:

   a. Log into Oracle Applications, and choose the System Administrator responsibility.

   b. Navigate to the Request Groups form (Standard Path: Security Responsibility Request).
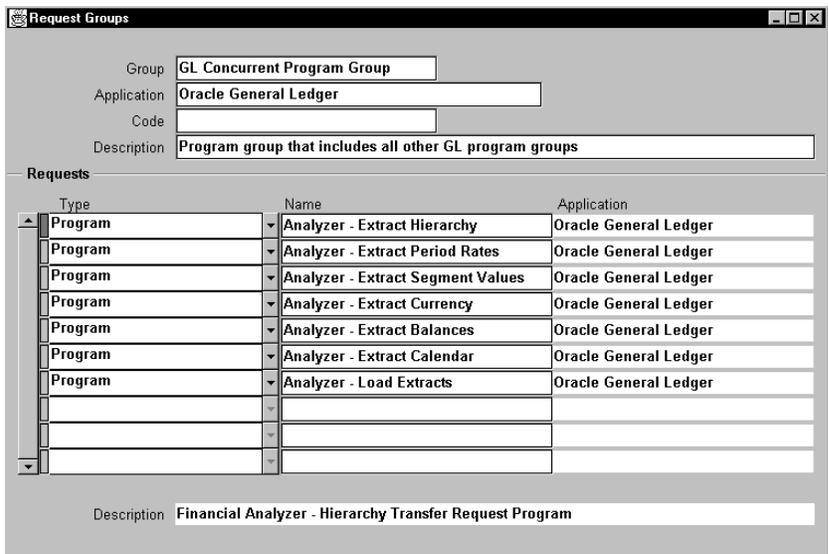
c. Query the report security group to which you want to add the extraction programs. This should be the report security group which is assigned to the responsibility you use to access General Ledger.

d. Add the following rows in the Requests block.

| Type | Name | Application |
|------|------|-------------|
| Program | Analyzer — Extract Balances | Oracle General Ledger |
| Program | Analyzer — Extract Calendar | Oracle General Ledger |
| Program | Analyzer — Extract Currency | Oracle General Ledger |
| Program | Analyzer — Extract Hierarchy | Oracle General Ledger |
| Program | Analyzer — Extract Period Rates | Oracle General Ledger |
| Program | Analyzer — Extract Segment Values | Oracle General Ledger |
| Program | Analyzer — Load Extracts | Oracle General Ledger |

e. Save your work.

The extraction programs will now be available when you access the Submit Request form in General Ledger.

See the *Oracle Applications Release 11 Installation Manual* for your platform for detailed installation instructions.

**To install Financial Analyzer:**

1. Install and configure the appropriate version of Express Server for your Unix or NT environment.

   **Note:** You must install Express Server before you can install Financial Analyzer. For detailed installation instructions, see the *Oracle Express Server Installation and Configuration Guide*.

2. If you are running Express Server on Unix, edit the `express.prm` file and add the following lines:

   ```
   TWO_TASK=<TWO_TASK for your General Ledger database>
   export TWO_TASK
   ```

   The `TWO_TASK` environment variable specifies your default Oracle database instance.

3. Use the Oracle Installer to install the Financial Analyzer Super Administrator component on the appropriate server. If you need additional information while running the program, you can choose the **Help** button in any dialog box to access the Oracle Installer Help system.

   **Important:** During the installation process, be sure to specify that you want to install the General Ledger Integration Module.

4. Use the Oracle Installer to install the Financial Analyzer client component on the appropriate PC.

5. Install additional Task Processor, Budget, or Analyst workstations as necessary for your Financial Analyzer system.

See the *Oracle Financial Analyzer Installation Guide* for detailed installation instructions.

**Important:** Once Financial Analyzer is linked to a particular instance of General Ledger, it cannot be linked to any other instance.

# Setting Up For the Extraction and Load Processes

Financial Analyzer communicates with General Ledger during the Financial Analyzer load process in the following ways:

- Financial Analyzer directly reads and loads data from General Ledger tables using SQL.
- The General Ledger extraction process for segments and balances creates temporary files, which Financial Analyzer must read during the load process

During data extraction, General Ledger automatically places the temporary files it creates for balance and segment values on the machine where the concurrent manager is running. Financial Analyzer must have access to these temporary files in order to process the segment and balance extracts.

Depending on your overall system configuration, you can configure the concurrent manager and Financial Analyzer in various ways to establish access to the temporary files. These methods are explained in the following sections.

See the *Oracle Applications System Administration Reference Manual* for more information on setting up the concurrent manager.

# Configuration 1

You can install the concurrent manager on a single machine that is running both Express Server and General Ledger software.

If you use this configuration, Financial Analyzer can automatically access the temporary extraction files.

# Configuration 2

You can install the concurrent manager on the machine that is running Express Server, while the General Ledger software is running on a different machine.

If you use this configuration, Financial Analyzer can automatically access the temporary extraction files.

**Note:** In order for this configuration to work properly, the two machines must be running the same operating system.

# Configuration 3

You can install two instances of the concurrent manager in the following locations:

1. Install one instance on the machine where Financial Analyzer is running, for the purpose of running the extraction process.

2. Install the other instance on another machine, for the purpose of running other General Ledger programs.

If you use this configuration, Financial Analyzer can automatically access the temporary extraction files.

**Note:** In order for this configuration to work properly, the two machines must be running the same operating system.

# Configuration 4

You can install the concurrent manager on a machine that is running the General Ledger software, while Express Server is running on a separate machine. Note that the two machines may be running the same or a different operating system. For this configuration you must perform additional steps to provide Express Server with access to the extraction files, as outlined below:

- If the machine where the General Ledger software and concurrent manager are running can be mapped to the machine that is running Financial Analyzer, do so. Then specify the location of the extract files so that Financial Analyzer can access them.

  For information about how to specify the location of the extract files, refer to the procedure below.

- If the machine running the General Ledger software and concurrent manager cannot be mapped to the machine that is running Financial Analyzer, you can use FTP to copy the extract files to the Financial Analyzer machine. You must then specify the location of the extract files so that Financial Analyzer can access them.

  For information about how to find the name and location of the extract files, as well as how to specify their location in Financial Analyzer, refer to the two procedures below.

  **Note:** You must copy the new file that is created each time you perform an extract.

The following procedures describe how to find the name and location of an extract file, and how to specify that location within Financial Analyzer.

**To find the name and location of an extract file:**

1. In General Ledger, navigate to the Transfer Requests form.

2. In the drop-down box above the table, select **File Specifications**.

   A list of file names and pathing information appears in the File area of the table.

   **Note:** The file is a flat, ASCII text file. Its name and location are specified at the time the concurrent manager creates the file.

**To specify the location of an extract file:**

1. From the Tools menu in Financial Analyzer, choose **Options**.

   The Options dialog box appears.

2. Choose the **General** button.

   The set of general Financial Analyzer options appears.

3. Select the **GL Extract File Directory** option.

The current path specified for this option appears in the edit bar.

4. Edit the path as necessary to specify the location of the extract file.

5. Choose the **Enter** button (☑) to place the path into the options table.

**Note:** You have to perform the steps in this procedure only once, unless the information changes and you need to modify the option setting. After you have specified the location, the system retains the information for subsequent actions.

# Chapter 3

# Defining Metadata in General Ledger

Metadata is the set of information you enter in General Ledger to represent structures in Financial Analyzer. Metadata consists of all the dimensions, filters, hierarchies, financial data items, and financial data sets you have defined in General Ledger. Financial Analyzer creates dimensions, dimension values, hierarchies, and variables based on the metadata information in General Ledger. This chapter describes how to define metadata in General Ledger.

## Defining Filters

You must first define filters to prepare General Ledger financial data for use in Financial Analyzer. With filters, you can limit the number of segment values that are imported into Financial Analyzer from the total population of the segments used by your General Ledger set of books.

Once you define filters, you can assign them to dimension definitions on the Dimension form or in the Financial Data Item form. Only those segment values which are included in your filter are used by Financial Analyzer in creating dimension values. If you do not assign filters, Financial Analyzer will create dimension values using all the segment values.

**▌▶  To define a filter in General Ledger:**

1. Navigate to the Filter form.

   (Standard path: Setup Analyzer Filter)

   | Filters [VISION] | | | |
   |---|---|---|---|
   | Name | CC1 | | |
   | Segment | Cost Center | | |
   | Description | Include only CC 000-299, 340-499, and 700-999 | [ ☐ ] | |

   | Type | | From | To | [ ] |
   |---|---|---|---|---|
   | Include | ▼ | 000 | 999 | |
   | Exclude | ▼ | 300 | 339 | |
   | Exclude | ▼ | 500 | 699 | |
   | | ▼ | | | |
   | | ▼ | | | |
   | | ▼ | | | |
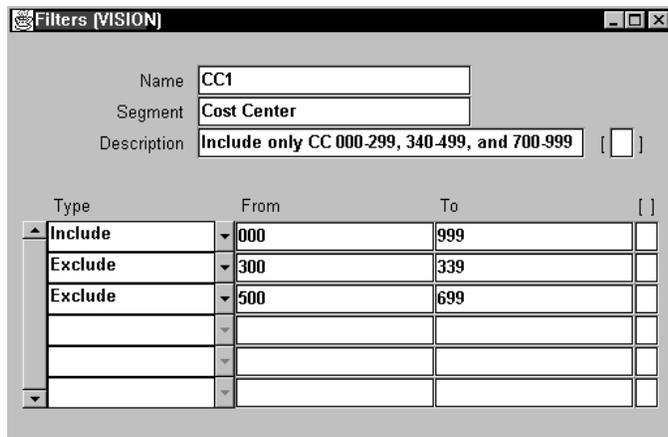
2. Enter a Name for your filter.

3. Enter the Segment for which you want to limit values.

4. (Optional) Enter a Description for the filter.

5. Enter ranges of segment values to include and exclude.

   **Important:** Financial Analyzer evaluates filters as follows:

   ☐ All segment values in an Exclude range are rejected.

   ☐ Any remaining values in one or more Include ranges are accepted.

   Thus, Financial Analyzer only loads segment values that are in at least one Include range and not in any Exclude range.

   **Recommended:** We recommend that you first include the entire range of possible values, then specifically exclude those values that you do not want.

   In the above example, the Include range specifies that all possible values for the segment Cost Center be included. The two Exclude ranges instruct General Ledger to exclude any Cost Centers that have values of 300 to 339 (inclusive) and 500 to 699 (inclusive).

6. Save your work.

**To modify an existing filter in General Ledger:**

1. Navigate to the Filter form.

2. Query the filter definition you want to modify.

3. Modify the filter definition as desired.

   ☐ You can modify the name, segment, or description.

   ☐ You can also add, modify, or delete the assigned ranges of segment values.

4. Save your work.

Financial Analyzer will reflect your modifications after you reload data from General Ledger.

**To delete filters in General Ledger:**

1. Make sure the filter you want to delete is not assigned to any dimensions or financial data items.

2. Navigate to the Filter form.

3. Query the filter you want to delete.

4. Choose **Delete Record** from the Edit menu.

5. Save your work.

# Defining Dimensions and Dimension Values

Dimensions are database objects in Financial Analyzer that organize the data contained in financial data items. They answer the following questions about data: what, when, and where. You use dimensions to select and work with specific subsets of data. For example, a financial data item called Actuals might be organized by the dimensions Line Item, Org, Product, and Time.

Before exporting your financial data from General Ledger, you must define the dimensions that will organize your data. You define dimensions in General Ledger by assigning one or more of your chart of accounts segments to the dimension definition.

**Note:** General Ledger automatically creates a dimension called Time based on the calendar for your set of books. You can query the Time dimension, but cannot update or delete it. There are no assigned segments. When you upload your data into Financial Analyzer, the program creates a custom GL Time dimension using your General Ledger accounting calendar.

**Recommended:** If you use a dependent segment in your chart of accounts, you should either:

■ Map the dependent segment to the same dimension as its independent segment

*or*

■ Leave the dependent segment unmapped to a dimension

See the *Oracle Financial Analyzer User's Guide* for more information on dimensions.

⟩⟩ **To define a new dimension in General Ledger:**

1. Navigate to the Dimension form.

   (Standard path: Setup Analyzer Dimension)



2. Enter a Name for your dimension.

3. Choose a Level for your dimension. The Level specifies whether to use detail segments or summary segments in Financial Analyzer.

   ☐ **Detail** — Financial Analyzer will select the detail values for the segments you specify in your dimension when you upload General Ledger data.

   ☐ **Summary** — Financial Analyzer will select the parent values for the segments you specify in your dimension when you upload General Ledger data. You need to define summary account templates to use summary dimensions.

   See the procedure "To assign segments to your dimension" later in this chapter for more information.

4. (Optional) Enter a description for your dimension.

5. Use the drop-down lists to choose Row, Column, and Selector labels. Labels determine how Financial Analyzer displays your dimension values in rows, columns, and in the Selector. There are three choices:

□ **Value** — Financial Analyzer displays only the segment value used by General Ledger.

□ **Description** — Financial Analyzer displays only the segment description used by General Ledger.

□ **Both** — Financial Analyzer displays both the segment value and description from General Ledger.

6. Enter an Object Name. Financial Analyzer uses the Object Name as an internal identifier for the dimension. Object Names can be up to 16 characters in length, each of which must be a letter (A-Z), number (0-9), underline (_), or period (**.**). The first character cannot be a number.

   **Important:** You must not use Express Server keywords as an Object Name. To find all Express reserved words at an Express command line type:

   ```
   show reserved
   ```

7. Enter an Object Prefix. Financial Analyzer uses the Object Prefix to uniquely identify your dimension in hierarchies, models, and attributes. Object Prefixes can be up to 6 characters in length, each of which must be a letter (A-Z), number (0-9), underline (_), or period (**.**). The first character cannot be a number. The default Object Prefix in Financial Analyzer is the first 6 characters of the dimension's Object Name.

8. Enter an Object Value Prefix for your dimension. An Object Value Prefix must be one character and must be alphabetic. Financial Analyzer uses the Value Prefix when creating dimension values.

   □ If you assign only one segment to your dimension, Financial Analyzer will create a dimension value for each segment value in your filter (or all segment values if you do not assign a filter) by appending the Object Prefix to each segment value.

   □ If you assign more than one segment to your dimension, Financial Analyzer will create a dimension value for each combination of segment values in your filter or filters (or all segment values if you do not assign any filters) by appending the Object Prefix to each combination of segment values.

9. Assign segments to your dimension.

**To assign segments to your dimension:**

1. In the Segment Mappings area, enter a Sequence number in the Seq column for each segment. Financial Analyzer uses the Sequence number to determine the order for combining segment values to create dimension values.

2. Choose the Segment to assign to your dimension. You can assign either detail segments or parent segments to your dimension based upon the level you selected for the dimension.

   □ **Detail Dimension** — Selecting the detail level creates a detail dimension in General Ledger. During the data upload, Financial Analyzer selects the detail segment values for the segments you specify in your detail dimensions.

   You can map one segment or multiple segments to a detail dimension. When you map multiple segments to a dimension, Financial Analyzer will group the segment values and descriptions for those segments.

   □ **Summary Dimension** — When you choose the summary level, you are creating a summary dimension. Financial Analyzer will select the parent or summary segment values for the segments you specify in your dimension.

   You can map only a single segment to a summary dimension.

   See the section "Mapping Data from General Ledger to Financial Analyzer" in Chapter 1 of this document for more information about detail and summary dimensions.

3. Specify a Maximum Description Size that Financial Analyzer will use for this segment when displaying dimension values and descriptions.

   **Note:** This field is required. However, Financial Analyzer only uses this value if you choose either Description or Both for at least one of your Row, Column, or Selector Labels.

4. (Optional) Assign a filter to each segment. If you assign a filter, Financial Analyzer will only use the segment values included in the filter to create dimension values. If you do not assign a filter, Financial Analyzer will create dimension values using all of the segment values in your General Ledger set of books.

5. Choose an Account Type for your segment. The Account Type defaults to **All**. If your segment is the natural account segment, you can also change Account Type to one of the following:

- □ Asset

- □ Liability

- □ Owners' Equity

- □ Revenue

- □ Expense

6. Repeat the above steps for each segment you want assigned to the dimension.

**To modify an existing dimension in General Ledger:**

1. Make sure that the dimension you want to modify is not assigned to any financial data items in a frozen financial data set.

2. Navigate to the Dimension form.

3. Query the dimension you want to modify.

4. Modify the dimension as desired.

   You can change the name, object name, description, and any of the labels or prefixes.

   **Important:** If you have already loaded this dimension into Financial Analyzer, the dimension must be deleted in Financial Analyzer and you must run the segment extract and load processes again in order for these modification to take effect.

   - □ You can add or modify segment mappings.

      **Important:** If you have already loaded this dimension into Financial Analyzer and it contains values, we recommend that you delete the existing values from the dimension and then rerun the load process with the new segment mappings.

&#9633;   You can change the Maximum Description Size field.

**Important:** This change will affect any new values that you add to the dimension. However, the description size of existing values will not be altered unless there is a change in the GL segment value description.

&#9633;   You can delete segment mappings, although you must assign at least one segment mapping to each dimension.

**Important:** If you have already loaded this dimension into Financial Analyzer and it contains values, we recommend that you delete the existing values from the dimension and then rerun the load process with the new segment mappings.

5. Save your work.

**To delete a dimension in General Ledger:**

1. Ensure that the dimension you want to delete is not assigned to any financial data items or hierarchies.

2. Navigate to the Dimension form.

3. Query the dimension you want to delete.

4. Choose **Delete Record** from the Edit menu.

5. Save your work.

**Important:** If you have already loaded this dimension into Financial Analyzer, you should delete it there as well.

# Defining Hierarchies

You can define hierarchies in General Ledger that you will use to summarize and drill down your data in Financial Analyzer. Financial Analyzer automatically creates hierarchies using the parent and child segment value relationships you define in the General Ledger Key Segment Values form.

The values of a dimension in your Financial Analyzer database can be related in tree-like organizational structures called hierarchies. These hierarchies enable the data associated with the dimension values to be aggregated at various levels along the hierarchy's 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. You can define any number of hierarchies on a particular dimension.

**Note:** Each hierarchy that you define on a particular dimension should be linked to a unique root node for the segment that is mapped to the dimension. The root node is the parent segment value that is the top-most node of a hierarchy.

Typically, these dimensions include GL Time, Product, and Organization, but you can define hierarchies for any dimension in your system whose definition includes hierarchy support. For example, you might want to define separate hierarchies for examining management and functional data.

**Note:** The hierarchy for the GL Time dimension is automatically generated from the accounting calendar defined in General Ledger and does not need to be manually defined.

See the *Oracle Financial Analyzer User's Guide* for more information on hierarchies

**▶ To define a hierarchy in General Ledger:**

1. Navigate to the Hierarchy form.

   (Standard path: Setup Analyzer Hierarchy)

   ```
   ┌─────────────────────────────────────────────────────────┐
   │ 🗒 Hierarchy [VISION]                          _ □ ✕     │
   ├─────────────────────────────────────────────────────────┤
   │                                                           │
   │            Name  │Org1              │                     │
   │  Base Dimension  │Org               │                     │
   │     Description  │Org hierarchy by cost center │  [  ]     │
   │                                                           │
   │  ┌─────────────────────────────────────────────────┐     │
   │  │  Seq     Segment           Root Node      [ ]    │     │
   │  │▲ │1    │ │Company       │ │99           │ │   │   │     │
   │  │  │2    │ │Cost Center   │ │999          │ │   │   │     │
   │  │  │     │ │              │ │             │ │   │   │     │
   │  │▼ │     │ │              │ │             │ │   │   │     │
   │  └─────────────────────────────────────────────────┘     │
   └─────────────────────────────────────────────────────────┘
   ```

2. Enter a Name for your hierarchy.

3. Select the Base Dimension. You can select any dimension you have defined.

4. (Optional) Enter a Description for your hierarchy.

5. Enter a Sequence number in the Seq column for each segment. Sequence numbers determine the order in which Financial Analyzer drills down on segments. In the above example, Financial Analyzer would drill down on the Company segment before drilling down on the Cost Center segment.

6. Enter a segment that is assigned to the dimension you selected.

7. Specify a Root Node for the Segment. This is the parent segment value that is the top-most node of a hierarchy.

8. Repeat Steps 5 through 7 until you have included all the segments that make up this dimension hierarchy.

**To modify an existing hierarchy**

1. Navigate to the Hierarchy form.

2. Query the hierarchy you want to modify.

3. Modify the hierarchy as desired.

   ☐ You can modify the name, base segment, or description.

   ☐ You can change the sequence numbers or root nodes, but you must enter a sequence number and root node for each segment that is assigned to your base dimension.

4. Save your work.

**Important:** If you have already loaded this hierarchy into Financial Analyzer, you must delete it in Financial Analyzer and rerun the hierarchy extraction process in order for the modifications to take effect.

**To delete a hierarchy in General Ledger:**

1. Navigate to the Hierarchy form.

2. Query the hierarchy you want to delete.

3. Choose **Delete** from the Edit menu.

4. Save your work.

**Important:** If you have already loaded this hierarchy into Financial Analyzer, you should delete it there as well.

# Defining Financial Data Items

Financial data items are Financial Analyzer database objects that either store or calculate financial data values. The financial data items you define using General Ledger data are stored financial data items.

See the *Oracle Financial Analyzer User's Guide* for more information on financial data items.

Each financial data item you define represents a type of General Ledger balance. You can create financial data items which enable you to review various balance types in Financial Analyzer. For example, you create financial data items for:

- Actual balances

- Budget balances

- Encumbrance balances

- Average balances (when average balance processing is enabled for your set of books)

- Statistical balances

- Functional and Statistical balances

- Foreign Entered balances

- Foreign Translated balances

You can define the financial data items you want to use in Financial Analyzer after you define the dimensions that will organize your data. You assign dimensions to financial data items.

**To define a financial data item in General Ledger:**

1. Navigate to the Financial Data form.

   (Standard path: Setup Analyzer Financial Data)



2. Enter a Name for your financial data item. This name is only used to identify the financial data item in General Ledger. Financial Analyzer does not use this name.

3. Choose the Set of Books from which you will upload financial information to Financial Analyzer.

4. (Optional) Enter a description for your financial data.

5. Use the drop-down lists to choose parameters for the balances you want to upload into Financial Analyzer.

   ▫ **Balance Type** — Choose one of the following balance types for your financial data item:

      ▫ **Actual** — Financial Analyzer will upload actual balances from General Ledger.

      ▫ **Budget** — Financial Analyzer will upload budget balances from General Ledger. If you choose budget balances, you must enter the name of your budget in the Budget/Encumbrance field.

**Note:** You can alter the budget name that is mapped to a financial data item and reload the balances into that financial data item.

- **Encumbrance** — Financial Analyzer will upload encumbrance balances from General Ledger. If you choose encumbrance balances, you must enter the name of your encumbrance type or select Total for total encumbrances in the Budget/Encumbrance field.

- **Average** — If average balance processing is enabled for your General Ledger set of books, you may upload average balances into Financial Analyzer. You must select either End of Day (EOD), Period-Average-to-Date (PATD), Quarter-Average-to-Date (QATD), or Year-Average-to-Date (YATD) balances for your financial data item.

- **Currency Type** — Choose one of the following Currency Types for your balances:

  - **Functional Only** — Financial Analyzer will extract financial data entered in or converted to your functional currency. This field will default to **Functional** if you choose the encumbrance balance type, since General Ledger only allows encumbrance accounting in the functional currency for your set of books.

  - **Statistical Only** — Financial Analyzer will extract financial data entered in STAT.

  - **Foreign Entered** — Financial Analyzer will extract financial data entered in a foreign currency.

  - **Foreign Translated** — Financial Analyzer will extract financial data translated to a foreign currency and financial data entered in a foreign currency.

  - **Functional and Statistical** — Financial Analyzer will extract financial data entered in or converted to your functional currency, and financial data entered in STAT.

    **Recommended:** You can load both functional and statistical balances into the same financial data item, provided that separate account segment values are defined for statistical values.

The default currency type is **Functional Only**.

- ❑ **Currency** — Choose a currency if required for the currency type you selected above. The following rules apply for the indicated currency type:

    - ❑ **Functional Only** — Currency defaults to the functional currency for your set of books. You cannot change it.

    - ❑ **Statistical Only** — Currency defaults to STAT. You cannot change it.

    - ❑ **Foreign Entered or Foreign Translated** — You must enter any currency other than your functional currency or STAT.

    - ❑ **Functional and Statistical** — Currency defaults to the functional currency for your set of books. You cannot change it.

6. Enter Object parameters for your financial data item.

- ❑ **Level** — Use the drop-down list to choose the detail or summary level for your financial data item.

    - ❑ **Detail** — If you choose the detail level, you can assign only detail dimensions to your financial data item. Financial Analyzer will upload detail data for this financial data item. Then, you can summarize your financial information in Financial Analyzer by solving hierarchies.

    - ❑ **Summary** — If you choose the summary level, you can assign both detail dimensions and summary dimensions to your financial data item. You must assign at least one summary dimension to your financial data item. When you use summary financial data items, you can upload financial information into Financial Analyzer which is already summarized in General Ledger. Therefore, you will not need to solve hierarchies in Financial Analyzer to perform multidimensional analysis on summarized financial information.

- ❑ **Status** — If you selected the summary level, you must validate this financial data item when you have completed the entire definition. General Ledger will perform a check to ensure that your segment dimensions correctly correspond to the summary template you entered for this financial data item. Once the check completes successfully, General Ledger will update the Status to **Validated**.

If you choose the detail level for this financial data item, this field will default to **Validated**.

□ **Label** — Enter a Label for your financial data item. This is the name Financial Analyzer will use to identify the financial data item for reports, graphs, and worksheets. This name must be unique for the entire applications instance.

□ **Object Name** — Enter an Object Name for your financial data item. Financial Analyzer will use this name internally for the variable that it creates from this financial data item. Object Names can be up to 16 characters in length, each of which must be a letter (A-Z), number (0-9), underline (_), or period (**.**). The first character cannot be a number.

**Important:** You must not use Express Server keywords as an Object Name. To find all Express reserved words at an Express command line type:

```
show reserved
```

7. Assign dimensions to your financial data. See the section on Specifying Dimension Order in this chapter for detailed instructions on assigning dimensions.

8. (Optional) Assign additional segments to your financial data. See the section Working With Additional Segments in this chapter for detailed instructions on assigning additional segments.

9. Save your work.

# Working with Detail Financial Data Items

Detail financial data items are those for which you chose the Detail Object Level. You can assign only detail dimensions to detail financial data items. Financial Analyzer will upload detail data from General Ledger. Then, you can summarize your financial information in Financial Analyzer by solving hierarchies.

▶▷ **To assign dimensions to a detail financial data item:**

1. Enter a Sequence Number for each row.

2. Enter each detail dimension you want to assign and assign Time to the financial data item.

   **Note:** You can assign up to 10 dimensions to your financial data item (including the Time dimension).

3. Save your work.

See the section "Mapping Data from General Ledger to Financial Analyzer" in Chapter 1 of this document for more information about detail financial data items.

# Working with Summary Financial Data Items

Summary financial data items are those for which you chose the Summary Object Level. You can assign both detail dimensions and summary dimensions to summary financial data items; however, you must assign at least one summary dimension to your financial data item.

When you use summary financial data items, you can upload financial information into Financial Analyzer which is already summarized in General Ledger. Therefore, you will not need to solve hierarchies in Financial Analyzer to obtain summarized financial information for multidimensional analysis. However, you can also solve hierarchies against your data if you wish to further aggregate your financial information in Financial Analyzer.

If you want to transfer summary financial information into Financial Analyzer, you must have summary templates defined in General Ledger. You should carefully plan out the summary templates you will use for transferring summary information to Financial Analyzer, because the detail and summary dimensions assigned to your summary financial data item must correspond with your summary templates.

**Recommended:** Keep the following guidelines in mind when planning your summary templates, summary dimensions, and summary financial data items:

- Your summary template(s) must use a rollup group for the segment mapped to the summary dimension(s) included in your financial data item.

- Your summary template(s) must use either a rollup group or a **D** (Detail) for segments which are not mapped to a dimension, but are included as Selections for the financial data item.

- Your summary templates can include a **D** (Detail), a **T** (Total), or a rollup group for the segment(s) which are not mapped to a dimension and are not included as Selections for the financial data item.

- When you transfer a summary template to Financial Analyzer, any parent value associated with that template should not roll up into a parent value associated with another template that you transfer within the same financial data item.

See Chapter 5 in the *Oracle General Ledger User's Guide* for more information about summary templates and rollup groups.

▶▷ **To assign dimensions to your summary financial data item:**

1. If necessary, navigate to the Financial Data form and query the financial data item.



2. Enter a Sequence Number for each row.

3. Enter the summary or detail dimension you want to assign, and include Time in the financial data item definition.

   **Note:** You can assign up to 10 dimensions to your financial data item (including the Time dimension).

4. Assign a summary template or templates to your financial data item.

5. Save your work.

▶▷ **To assign summary templates to your summary financial data item:**

1. (Optional) When you have finished assigning your dimensions to the financial data item, decide whether to include Filters in your financial data item. See Working With Additional Segments.

2. When you have finished assigning dimension and Filters , choose the Summary Templates alternate region by clicking the Dimensions poplist and choosing **Summary Templates**.

3. Use the List of Values to select summary templates which correspond to the Structure to Match indicated on the form.

   □ **D** (Detail) — The summary template must use a **D** as the value for the corresponding segment. The Structure to Match requires this value when the segment is included in a detail dimension assigned to the financial data item.

   □ **R** (Rollup Group) — The summary template must use a rollup group as the value for the corresponding segment. The Structure to Match requires this value when the segment is included in a summary dimension assigned to the financial data item.

   □ **D or R** (Detail or Rollup Group) — The summary template must use either a rollup group or a **D** as the value for the corresponding segment. The Structure to Match requires a **D** or rollup group when the segment is included as a Filter for the financial data item.

   □ **Any** — The summary template can use either a **D** (Detail), a **T** (Total), or a rollup group for the corresponding segment. The Structure to Match allows any value when the segment is not included in either a dimension or a Filter for the financial data item.

4. Save your work.

5. When you have finished assigning summary templates to your financial data item, you must validate it. Press the **Validate** button. General Ledger will perform a check to ensure that your summary templates correctly correspond to the segments you have included in dimensions or as Filters for this financial data item. When the check completes successfully, General Ledger will update the Status to Validated.

See the section "Mapping Data from General Ledger to Financial Analyzer," in Chapter 1 of this document for more information on summary financial data items.

# Working with Additional Segments

The following example illustrates what happens when there are account segments in General Ledger that are not mapped to an Financial Analyzer dimension:

- Assume your General Ledger uses four account segments: Company, Cost Center, Account, and Product Line. Now, assume you define two dimensions: Org (Company, combined with Cost Center) and Line (Account). When loading data from General Ledger, Financial Analyzer will summarize all detail Product Line values into one Org.Line combination. For example, values for Product Lines 200, 300, and 400 will be summarized into one Org.Line variable.

- If you want to limit the detail values being summarized into Org.Line, you can specify additional segments and filters on the Financial Data form. For example, assume you use Product Line as an additional segment, with a range set defined as 200 through 300. Now, Financial Analyzer will only summarize values for Product Lines 200 and 300 when creating its Org.Line detail entries. Values for Product Line 400 are not included.

**⟩⟩ To assign additional segments to your financial data (optional):**

1. If necessary, navigate to the Financial Data form and query the financial data item.



2. Choose the Filters alternative region by clicking the Dimensions poplist and choosing Filters.

3. Enter the Segment you want to assign to your financial data. You can enter any segment that is not assigned to one of the dimensions you entered for this financial data.

4. Enter a Filter. Financial Analyzer will only load data for the segment values that are included in the filter.

# Modifying and Deleting Financial Data Items

**To modify your financial data item:**

1. Make sure the financial data item you want to modify is not included in a frozen financial data set.

2. Navigate to the Financial Data form.

3. Query the financial data item you want to modify.

4. Modify the financial data item as desired

   **Important:** If you have already loaded this financial data item into Financial Analyzer, you must delete it in Financial Analyzer, and you must run the segment extract and load processes again in order for these modifications to take effect.

   The only exception to this rule is if you change the budget name that is mapped to the financial data item. In that case, you can load the new balances into the existing financial data item.

   □ You can modify the name, label, object name, set of books, currency type, currency, balance type, budget, and description.

   □ If your financial data item represents budget balances, you can modify the budget name.

   □ You can add, modify, or delete the dimensions that are assigned to your financial data item, though you must at least assign the Time dimension to your financial data item.

   □ You can add, modify, or delete the filters that are assigned to your financial data item.

5. Save your work.

**To delete a financial data item:**

1. Ensure that the financial data item you want to modify is not included in a frozen financial data set.

2. Navigate to the Financial Data form.

3. Query the financial data item you want to delete.

4. Choose **Delete Record** from the Edit menu.

5. Save your work.

# Assigning Dimensions to Financial Data Items

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

The way you order the dimensions in a financial data item definition depends on whether the data associated with the financial data item is densely or sparsely populated.

You must order the dimensions in a particular way in the financial data item definition to take advantage of sparsity handling. Likewise, if you do not plan to take advantage of sparsity handling, the financial data item's dimension order is still very important.

## Dense and Sparse Data

The data in a financial data item can be dense or sparse. The data is dense when a financial data item has a substantial number of cells containing values or amounts other than NA values. Conversely, the data is sparse when a financial data item has many cells populated with NA values rather than with values or amounts. Data sparsity occurs when certain combinations of dimension values do not contain data.

If you think a financial data item is sparse, use the Financial Analyzer sparsity feature to store the data efficiently. This can have a big impact on the storage and performance of the database.

The sparsity feature in Financial Analyzer prompts you to identify which combinations of the dimensions in the financial data item definition are sparse. When you specify the sparse dimensions, Financial Analyzer will create a *composite*. A composite is a structure that holds the combinations of dimension values where data exists in the financial data item.

The next section describes how to order dimensions to create efficient financial data item definitions in General Ledger. The following section describes how to control data sparsity in Financial Analyzer when you load the financial data items you have created in General Ledger.

# Specifying Dimension Order

The order in which you should select the dimensions in your financial data items depends on whether the data in the financial data item is deemed to be dense or sparse.

**Recommended:** For dense data, where limiting sparsity is not an issue:

- Your time dimension should be the last dimension in the financial data item definition.

- The dimension mapped to the natural account segment should be first in the financial data item definition. Other dimensions 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 had four dimensions, Account, Organization, Product and Time, where the Account dimension was mapped to the natural account segment the, the order of the dimensions should be:

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

**Recommended:** For sparse data:

- You must have at least one dense dimension

- Dimensions identified as dense should be placed first in the financial data item's definition

- 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 then you may see better load and solve performance by placing the Time dimension last of all dimensions. If you are consistently processing a time series then

by placing the Time dimension last of the dense dimensions you may see better 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 had 4 dimensions, Account Organization, Product and Time and the relationship between Account, Organization and Product was sparse the order of the dimensions should be

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

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

If a Financial Data Item had 4 dimensions, Account Organization, Product and Time and only the relationship between Organization and Product was sparse the order of the dimensions could be

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

where Organization and Product were in the composite and typically a time series of data was loaded and solved at once.

Alternatively if the order of the dimensions could be

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

where Organization and Product were in the composite and typically one period's data was loaded and solved at once.

## Handling Data Sparsity for a Financial Data Item Defined in General Ledger

The following procedure outlines the steps that you must perform to limit data sparsity in financial data items that you create in General Ledger and load into Financial Analyzer.

**Note:** You should limit data sparsity in the financial data item definition before you populate the financial data item with balance data from General Ledger.

**⮀ To limit data sparsity:**

1. In your General Ledger system, define a financial data item.

   For more information, refer to the section "Defining Financial Data Items" earlier in this chapter.

2. Use the following steps to move the financial data item definition from the General Ledger system into the super administrator's personal database in the Financial Analyzer system.

   **Note:** Each step in the following procedure refers you to the appropriate chapter of this manual, which provides conceptual and procedural information for each task.

   a.  In the General Ledger system, run the segment extraction program.

      See the section "Segment Values Extraction Program" in Chapter 4 of this document for more information.

      **Important:** Do *not* extract balance data at this time because it will automatically be loaded along with the segment data, and the purpose of this procedure is to manage data sparsity for financial data items *before* you populate them.

   b.  Run the Financial Analyzer load program to incorporate the extracted segment information into the shared database on the Financial Analyzer system.

      See the section "Loading Financial Data" in Chapter 5 of this document for more information.

   c.  Refresh the General Ledger structures in the super administrator's personal database.

      See the section "Loading Financial Data" in Chapter 5 of this document for more information.

3. In your Financial Analyzer system, work with the financial data item to limit data sparsity.

   See the *Oracle Financial Analyzer User's Guide* for more information.

4. From the super administrator's personal database, distribute the financial data item definition to the shared database.

5. In your General Ledger system, run the balance extraction program.

See the section "Balances Extraction Program" in Chapter 4 of this document for more information.

6. Follow Steps 2b and 2c of this procedure to load the balance data into the financial data items in the shared database on the Financial Analyzer system.

# Defining Financial Data Sets

After you define the financial data items to upload into Financial Analyzer, you must define a financial data set to group the financial data items. Financial data sets allow you to view and compare multiple financial data items simultaneously, such as actuals and budgets.

**Note:** You can only define one financial data set for each chart of accounts.

▶▷ **To define a financial data set:**

1. Navigate to the Financial Data Set form.

   (Standard path: Setup Analyzer Financial Data Set)



2. Enter a Name for your financial data set.

3. Assign financial data items to your financial data set. You can assign as many financial data items as you want.

4. Enter your segment sort order using the Segment Sort Order alternative region. You must enter a sequence number for each of your General Ledger segments. You can leave gaps between sequence numbers, but each sequence number must be unique (in other words, you cannot enter the same sequence number for more than one segment).

Financial Analyzer uses the segment sort order to determine the order in which to load segments and segment values. Your segment sort order can greatly impact performance when loading data into Financial Analyzer.

Refer to the section "Choosing a Segment Sort Order" later in this chapter for information on how to maximize performance by choosing the best segment sort order.
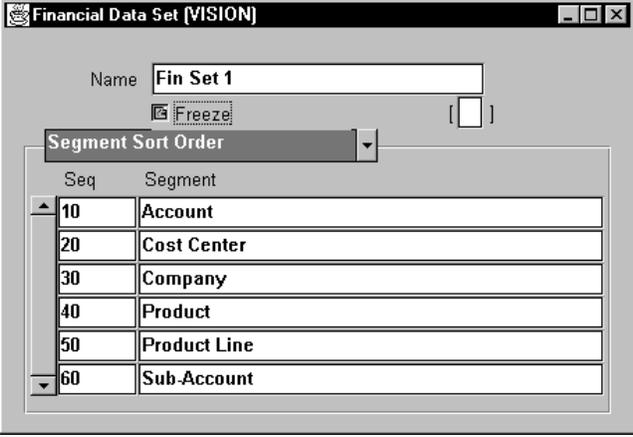


5. Freeze your financial data set after you finish assigning financial data items.

6. Save your work.

### ▶▶▷ To modify a financial data set:

1. Navigate to the Financial Data Set form.

2. Query the financial data set you want to modify.

3. Unfreeze the financial data set.

4. Modify the financial data set as desired. You can change the name, as well as add, modify, or delete the assigned financial data items.

5. Freeze the financial data set when you are finished with your modifications.

6. Save your work.

▌▷ **To delete a financial data set:**

1. Navigate to the Financial Data Set form.

2. Query the financial data set you want to delete.

3. Unfreeze the financial data set.

4. Choose **Delete** from the Edit menu.

5. Save your work.

# Choosing a Segment Sort Order

To maximize performance when loading data into Financial Analyzer, you should sort your General Ledger segments to mirror the order of the dimensions as they are defined in the financial data item. When you sort the segments, you assign a sequence number to each. Segments that are not mapped to any dimension should be assigned a sequence number that is higher than the segments that are mapped to dimensions.

**Note:** Because the GL Time dimension is not mapped to a segment, ignore it when specifying segment sort order.

# Example

The following set of dimensions was assigned to the financial data item named Actuals. The dimensions were defined in the order shown:

- GL Time
- Line Item
- Organization
- Product

Given that the segment sort order should reflect the order in which the dimensions are assigned in the financial data item, the segments associated with the dimensions should be sorted as in the following table. Note that the sequence numbers associated with the segments reflect the order as well.

| Sequence Number | Segment | Dimension |
| --- | --- | --- |
| 10 | Account | Line |
| 20 | Company | Organization |
| 30 | Cost Center | Organization |
| 40 | Product | Product |
| 50 | Product Line | Not mapped to any dimension |
| 60 | Sub-Account | Not mapped to any dimension |
|  | No segment to map | Time (GL Time) |

**Note:** You must still assign a sequence number to the Sub-Account segment, even though it does not map to any Financial Analyzer dimension.

If you entered a segment sort order other than the order listed above, Financial Analyzer would still load your General Ledger data, but the load process would probably run more slowly.

# Chapter 4

# Extracting Financial Data from General Ledger

After defining your metadata, you can transfer your financial data from General Ledger to Financial Analyzer. Transferring data is a two-step process:

1. You extract the data by running various extraction programs in General Ledger.

2. You load the extracted data into Financial Analyzer by submitting a load request and then running the Task Processor (if it is not already running).

This chapter describes how to extract data from General Ledger.

You can run the following extraction programs from General Ledger:

- Analyzer — Extract Balances
- Analyzer — Extract Calendar
- Analyzer — Extract Currency
- Analyzer — Extract Hierarchy
- Analyzer — Extract Period Rates
- Analyzer — Extract Segment Values
- Analyzer — Load Extracts

After your extraction programs complete, you must submit a load request and then run the Task Processor (if it is not already running) to create
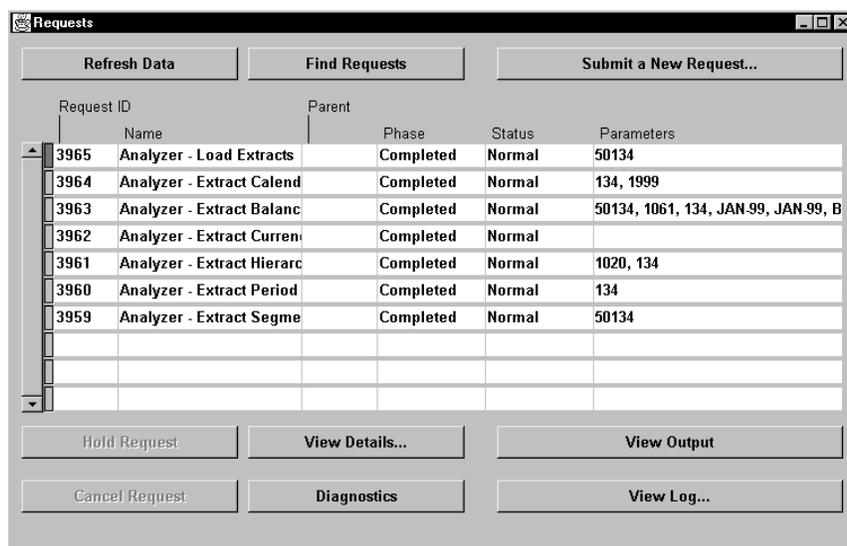
dimensions, dimension values, and hierarchies, as well as load data into financial data items.

# Running Extraction Programs

You run extraction programs using the General Ledger Submit Requests form.

▌▷ **To submit extraction requests:**

1. Navigate to the Submit Requests form.

    (Standard path: Reports Request Standard)

| Request ID | Name | Parent | Phase | Status | Parameters |
|---|---|---|---|---|---|
| 3965 | Analyzer - Load Extracts | | Completed | Normal | 50134 |
| 3964 | Analyzer - Extract Calend | | Completed | Normal | 134, 1999 |
| 3963 | Analyzer - Extract Balanc | | Completed | Normal | 50134, 1061, 134, JAN-99, JAN-99, B |
| 3962 | Analyzer - Extract Curren | | Completed | Normal | |
| 3961 | Analyzer - Extract Hierarc | | Completed | Normal | 1020, 134 |
| 3960 | Analyzer - Extract Period | | Completed | Normal | 134 |
| 3959 | Analyzer - Extract Segme | | Completed | Normal | 50134 |

Buttons: Refresh Data | Find Requests | Submit a New Request...

Hold Request | View Details... | View Output

Cancel Request | Diagnostics | View Log...

2. Choose **Single Request** from the Type field.

3. Enter the Name of the extraction request you want to run. You can choose from the list of all General Ledger requests by clicking the **List of Values** button.

    *or*

    Choose from the list of extraction requests by typing "`Analyzer`" and pressing TAB.

**Note:** Your responsibility's request group determines which requests appear in the list.

4. A Parameters window automatically appears if you select an extraction request that requires parameter values. The prompts in the Parameters window are specific to the request you select. For example, the Calendar extraction program prompts you to enter your Set of Books and Fiscal Year, while the Segment Values extraction program does not require any parameters.

   Once you enter the values in the required parameter fields and choose **OK**, the Parameters window closes, and your parameter values are concatenated and displayed in the Parameters field.

5. Schedule your extraction requests for resubmission if desired (see next task).

6. Choose the **Submit** button to submit your extraction program request.

**To scheduling your extraction requests to run automatically**

1. From the Submit Requests form, click on the **Schedule** button from the At These Times region. You can choose:

   □ **As Soon As Possible** — Choose this option to submit the request just once at the current time.

   □ **Once** — Choose this option to submit the request just once at a specific time. A special time field appears that lets you specify the time of day to submit your request. The field accepts values based on a 24 hour clock using the format HH:MM:SS.

   □ **Periodically** — Choose this value to specify resubmission at a specific interval of time. The fields in this window let you specify an interval of minutes, hours, days, weeks, or months to wait before resubmitting a request. You can also specify whether to count your interval from the requested start time of the request or from the completion time of the request. If your request contains date parameters, you can choose **Increment date parameters each run** to have the value for that parameter be adjusted to match the resubmission interval.

□ **On Specific Days** — Choose this value to specify resubmission on specific day(s) of every week or every month. A calendar appears for you to select specific day(s) of every week or dates(s) of every month. If your request contains date parameters, you can choose **Increment date parameters each run** to have the value for that parameter be adjusted to match the resubmission interval.

2. Enter a Start Date and time to indicate when to submit the request.

   If you do not specify a start time, Oracle Applications uses the value from your user profile option Concurrent:Request Start Time or the current time as the default.

3. Enter an End Date to specify when to end the resubmission of your request.

   Whether a request completes successfully or in error, Oracle Applications immediately submits the next run if the next requested start date and time are on or before the end date and time you specify. If you do not specify an end date, the request or request set repeats indefinitely until you cancel it.

4. Choose **Submit** to submit your request.

Oracle Applications assigns a request ID to each request submission so that you can identify the results of the request when it is complete. The Submission History region will display the programs and parameters you have submitted, along with the corresponding request IDs. You can use the request ID to query for your request status in the Transfer Requests window. Oracle Applications also assigns a new request ID number to each resubmission of a request and displays the request ID in the log file of the previous request.

# Balances Extraction Program

The balances extraction program will write your General Ledger account balances to a temporary file. When you load data into Financial Analyzer, the system reads this temporary file and uses any filters to load your financial data into the appropriate variables.

When you run the balances extraction program, you enter the following parameters for the balances you want to transfer to Financial Analyzer:

- **Set of Books** — Enter the set of books whose balances you want to transfer to Financial Analyzer.

- **Start Period** — Enter the earliest accounting period for the extraction.

- **End Period** — Enter the latest accounting period for the extraction. General Ledger will only extract balances for accounting periods in the range you enter.

- **Balance Type** — Choose whether to extract actual, budget, or encumbrance balances. If you have average balancing processing enabled for your set of books, you can also choose the following:

  - End of Day

  - Period-Average-to-Date (PATD)

  - Quarter-Average-to-Date (QATD)

  - Year-Average-to-Date (YATD)

  **Note:** When you extract actual, budget, or encumbrance balances, the General Ledger software will extract the period movement for revenue and expense account types and the period closing balance for asset, liability, and owner's equity account types.

- **Budget/Encumbrance Type** — If you chose the budget balance type, enter the budget name. If you chose the encumbrance balance type, enter the encumbrance type. You can also select **Total** for total encumbrances or select **All** for all encumbrances *except* total.

- **Day of Period** — If you have average balancing processing enabled for your set of books, you can choose the day in the period on which to calculate average balances.

- **Level** — Choose either **Detail** or **Summary**. General Ledger will extract detail balances or summary balances based on this selection. If you choose **Summary**, you must also enter a summary template in the Template field.

- **Template** — If you chose the summary balance level, you must enter a specific summary template or **All** to extract all summary templates from General Ledger.

You run the balances extraction program whenever you want to transfer account balances from General Ledger to Financial Analyzer. For example, you might run the balances extraction program after you close each accounting period in General Ledger. When you load a balance extract, Financial Analyzer adds new dimension values where necessary and assigns the balances to the financial data items.

# Calendar Extraction Program

The calendar extraction program will select your accounting calendar. When you load data into Financial Analyzer, the system will create your custom time dimension based on this accounting calendar.

When you run the calendar extraction program, you enter the following parameters:

- **Set of Books** — Enter the set of books whose accounting calendar you want to transfer to Financial Analyzer.

- **Fiscal Year** — Choose the fiscal year for which you want to create dimension values for your time dimension.

Financial Analyzer will create:

- A dimension value for each accounting period

- A dimension value for each quarter and for the year

- A hierarchy for your Time dimension, such that accounting periods roll up into the corresponding quarters, and quarters roll up into the year

**Note:** You run the calendar extraction program for a fiscal year at a time. Thus, if you want to create time dimension values for three years, you must submit three calendar extraction programs, one for each year.

You run the calendar extraction program whenever you want to expand your Time dimension. For example, you could run the program once a year, to add a year's worth of accounting periods to your Time dimension.

# Currency Extraction Program

The currency extraction program will select your General Ledger currencies. When you load data into Financial Analyzer, the system will create a from-currency dimension and a to-currency dimension. These dimensions are used for storing conversion rates. They are not used with your financial data, so you do not assign these dimensions to financial data items in General Ledger.

The currency extraction program does not require any parameters.

You only need to run this extraction program if you want to transfer your exchange rates from General Ledger to Financial Analyzer for analysis. In this case, you must also run the period rates extraction program. Financial Analyzer will create variables for your period-end and period-average rates, and you can use these variables in calculations with your financial data. You do not need to run this extraction program to transfer foreign-entered or foreign-translated balances.

# Hierarchy Extraction Program

The hierarchy extraction program selects your General Ledger hierarchies. When you load data into Financial Analyzer, the system creates hierarchies using the parent and child segment value relationships defined in General Ledger. You should therefore be careful when defining these relationships in General Ledger.

> **Note:** Loading hierarchies into Financial Analyzer is dependent on the leaf-level values of those hierarchy existing. These leaf-level values are loaded when Financial Analyzer processes a Balance Extraction.

After loading data into Financial Analyzer, you then solve your data to aggregate financial data along your hierarchies. You can accomplish this by creating solve definitions in Financial Analyzer in which you associate stored financial data items with hierarchies for the purpose of aggregating data and solving data models.

See the *Oracle Financial Analyzer User's Guide* for more information on hierarchies, models, and solving data.

The hierarchy extraction program allows you to transfer a specific hierarchy by entering a name in the Hierarchy parameter, or transfer all hierarchies by selecting the **All** value. Normally, you transfer all your General Ledger hierarchies.

> **Tip:** If you want to transfer a particular hierarchy, use the Hierarchy parameter to specify the hierarchy you want to transfer to Financial Analyzer.

You run the hierarchy extraction program whenever you want to update your hierarchies in Financial Analyzer. For example, if you reorganize your General Ledger cost centers, you would run the hierarchy extraction program to reflect your reorganization in Financial Analyzer.

# Period Rates Extraction Program

The period rates extraction program will select your General Ledger period-end and period-average rates. When you load data into Financial Analyzer, the system will create a variable for your period-end rates and a variable for your period-average rates. Financial Analyzer will load the rates you have defined in General Ledger into these variables. These variables are dimensioned by your from-currency dimension, your to-currency

dimension, and your time dimension. You can use these variables in calculations with your financial data.

When you run the period rates extraction program, you enter the following parameter:

- **Set of Books** — Enter the set of books whose period rates you want to transfer to Financial Analyzer.

You only need to run this extraction program if you want to transfer your exchange rates from General Ledger to Financial Analyzer for analysis — you do not need to run this extraction program to transfer foreign-entered or foreign-translated balances.

# Segment Values Extraction Program

The segment values extraction program will write your General Ledger segment values to a temporary file. When you load a segment extract into Financial Analyzer, the system performs the following tasks:

- It defines new dimensions and financial data items.
- It creates and updates segment metadata, which is used when new dimension values are added during balance and hierarchy loads.
- It alters dimension descriptions if a segment description has been altered.

**Note:** The segment values extraction program must be the first extraction process you run after completing the mapping process in the General Ledger.

The segment values extraction program does not require any parameters.

You run the segment values extraction program:

- When you have defined new dimensions or financial data items.
- Prior to a balance or hierarchy extraction.

- When you have altered segment descriptions that are mapped to existing dimension values in Financial Analyzer, and you want the description changes to be reflected.

# Load Extracts Program

The load extracts program automatically starts the process which loads extraction requests into Financial Analyzer. When the automatic load process is selected in Financial Analyzer, you can schedule the load process and other tasks (i.e. solves) in Financial Analyzer to be performed after the General Ledger load has completed.

See Chapter 5, "Loading Financial Data," for the setup necessary in Financial Analyzer to enable the automatic load process.

When you run the load extracts program in General Ledger, all preceding extraction requests that have a status of New or Extracting in the Transfer Requests form (refer to the following section, "Viewing Extraction Program Status") will be automatically loaded into Financial Analyzer when they have completed.

The load extracts program does not require any parameters.

You run the load extracts program:

- When you want to automatically load General Ledger extractions in Financial Analyzer.
- After you have enabled the automatic load function in Financial Analyzer (refer to Chapter 5, "Loading Financial Data").
- After you have submitted your other extraction programs in General Ledger.

# Viewing Extraction Program Status

After running an extraction program, you can view the status of your requests on-line.

▌▶ **To review the status of your extraction requests:**

1. Navigate to the Transfer Requests form.

   (Standard path: Reports Request Analyzer)

| Transfer Requests [VISION] | | | | | |
|---|---|---|---|---|---|
| | | | Calendar/Rates Parameters ▼ | | |
| Program | ID | Status | Set of Books | | Year |
| Load | 3965 | New ▼ | | | |
| Calendar | 3964 | New ▼ | Vision | | 1998 |
| Balances | 3963 | New ▼ | Vision | | |
| Currency | 3962 | New ▼ | | | |
| Hierarchy | 3961 | New ▼ | | | |
| Rates | 3960 | New ▼ | Vision | | |
| Segment | 3959 | New ▼ | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

2. To view the extraction requests that you have submitted, select **Run** from the Query menu. Each request will have one of the following statuses:

   □ **Extracting** — The program is extracting data from General Ledger.

   □ **New** — The data extraction is complete. Data is ready to be loaded into Financial Analyzer.

   □ **Loading** — Financial Analyzer is loading the extracted data.

   □ **Loaded** — The data load is complete. You can review and analyze your data in Financial Analyzer.

□ **Launched** — The load extracts program has triggered the load process in Financial Analyzer.

□ **Cancel** — The transfer request was canceled.

□ **Error** — An error occurred during the transfer request. Refer to the extraction program log report to determine the cause.

3. The form displays the date that the extraction process began, the date the extraction completed, the date that the load process began, and the date that the load completed. To view the parameters entered during each extraction submission, use the Dates poplist. You can also use the Dates poplist to view the File Specifications for the temporary files created by the Balance and Segment Values extraction programs.

# Extraction Program Summary

The following table summarizes the six extraction programs. Please note that the frequency shown in the table is an example of how often users might run the extraction programs. It is not a requirement.

| Program | Purpose | Frequency | Dependencies |
|---------|---------|-----------|--------------|
| Balances | Transfer balances from GL to OFA and add dimension values in OFA. | After you close each GL accounting period. | OFA only loads balances if the appropriate segment metadata exists in OFA. Therefore, you should run a balance extraction in conjunction with the segment values extraction. |
| Calendar | Create a custom time dimension in OFA. | When you set up the link, and then once a year. | None. |
| Currency | Create the currency-from and currency-to dimensions in OFA. | When you set up the link, and then if you enable additional GL currencies. | None. |

| Program | Purpose | Frequency | Dependencies |
|---------|---------|-----------|--------------|
| Hierarchy | Create hierarchies for your dimensions in OFA and add dimension values in OFA. | When you set up the link, and then whenever you modify your GL hierarchies. | OFA only creates/modifies hierarchies if the corresponding segment metadata exists in OFA. Therefore, you should run the hierarchy extraction with the segment values extraction. |
| Period Rates | Transfer period rates from GL to OFA. | Once a period. | OFA only loads period rates for the currencies included in the currency-from and currency-to dimensions. Therefore, you should run the currency extraction program at least once before running the period rates extraction program. |
| Segment Values | Create OFA dimensions and FDIs, create segment metadata from your GL segments, and alter dimension descriptions. | When you set up or change meta-data, when you perform a hier - archy or balance extract, and when you alter existing GL segment descriptions. | OFA only creates dimension values if the corresponding segment values have associated balances. Therefore, you should always run the segment values extraction with a balance and hierarchy extraction. |
| Load Extracts | To start automatic load process | When you want to automatically load extractions into OFA . | OFA only runs the automatic load process if you check the 'Pause for GL extracts to complete' box in the Submit Load Request form and start the Task Processor in OFA. You should always run at least one other extraction with the Load Extracts program. |

# Chapter 5

# Loading Financial Data into Financial Analyzer

Once the General Ledger data is mapped to Financial Analyzer objects and transferred, a Super Administrator can load the data into Financial Analyzer.

This chapter describes how to load General Ledger data into Financial Analyzer. It also describes how to create dimension values for those segment values that were not associated with balances at the time the data was loaded into Financial Analyzer. Finally, this chapter describes how to maintain the database objects once they are loaded.

## Overview of the Load Process

When you load data into Financial Analyzer, you load it into the shared database. The shared database is the location where dimensions, financial data items, and hierarchies are created and updated. Dimension values are added to the shared database, and financial data items are populated with balance data here.

After a load process where new structures have been added, you are prompted to refresh new structures, such as dimensions, dimension values, financial data items, and hierarchies, from the shared database into the super administrator's personal database. Balance data remains in the shared database unless you run the refresh data process to bring it into the personal database.

To aggregate data along the hierarchies in your database, you must run a solve definition on the financial data items after the load process is complete.

When you submit a load request, Financial Analyzer processes the extracts that have been made in the General Ledger since your last load request. When loading the various types of data that have been extracted from the General Ledger, Financial Analyzer performs the following tasks:

- The segment load:

  □ Defines new dimensions and financial data items.

  □ Creates and updates segment metadata, which is used when new dimension values are added during balance and hierarchy loads.

  □ Alters dimension descriptions if a segment description has been altered.

- The Calendar load:

  □ Defines the GL Time dimension, if it does not exist.

  □ Populates the GL Time dimension from the General Ledger accounting calendar.

- The Currency load:

  □ Defines From and To currency dimensions, if they do not exist.

  □ Populates the dimensions with currencies from the General Ledger.

- The Period Rates load:

  □ Defines an exchange rate financial data item, if it does not exist.

  □ Populates the financial data item with rates from the General Ledger.

- The Balance load:

  □ Adds new dimension values that correspond to leaves in the General Ledger parent/child relationships.

  □ Populates financial data items.

  □ Makes all credit balances associated with revenue, liability, and owners' equity account types positive.

- The Hierarchy load:
  - □ Defines new hierarchies, if they do not exist.
  - □ Adds new dimension values that correspond to parents in the General Ledger parent/child relationships.
  - □ Updates the hierarchical relationships between dimension values.
- The Automatic Load:
  - □ Automatically loads extractions from General Ledger when the General Ledger extraction processes have completed.

# Loading Financial Data

When loading General Ledger data, you need to communicate with the host computer where the data resides. When you refresh structures into the super administrator's personal database, you can review which database structures from General Ledger have been added or changed.

**To load data from General Ledger:**

1. From the Manage menu, choose **General Ledger Interface**. A cascading menu appears.

2. From the cascading menu, choose **GL Access Settings**. The GL Access Settings dialog box appears.
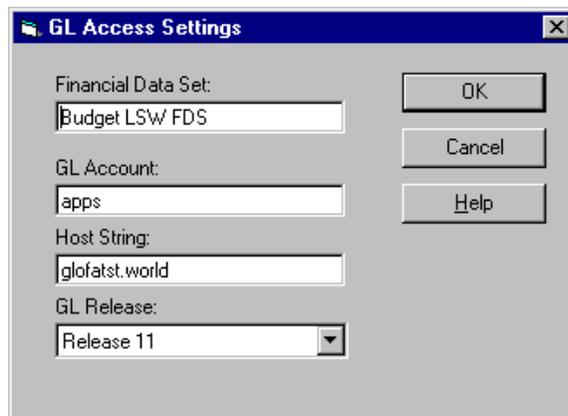
3. Specify the financial data set, GL account, Host String, and GL Release for the data to be loaded from General Ledger in this dialog box.

    □ The **Financial Data Set** is defined in General Ledger using the Financial Data Sets form. Financial Analyzer loads data for all of the financial data items assigned to the financial data set you enter.

    **Important:** The financial data set name is case sensitive. Make sure to enter it exactly as it was defined in General Ledger.

    □ The **GL Account** is the Oracle account that has read access to the General Ledger database tables. This is the APPS account

    **Note:** The GL Account is not the same as the username you enter when you login to General Ledger. If you are not sure of the name of your account, contact your General Ledger System Administrator.

    □ The **Host String** is the name of the General Ledger database where data will be loaded from. This name is the database alias as set in the SQL*Net configuration where Express Server is installed.

    □ The **GL Release** is Release 11.

**Important:** After the first successful load of a segment request, the financial data set name is established and should not be changed. During subsequent connection attempts, the name you enter must correspond to the established financial data set name for the systems to connect.

See Chapter 3 in this document for more information on defining financial data sets.

4. Choose **OK**.

5. From the Manage menu, return to the General Ledger Interface cascading menu and choose **Submit Load From GL**. The Submit Load Request dialog box appears.

```
Submit Load from GL                              ×

     Password              │       Pause for GL

                                          ┌──────────────┐
                                          │      OK      │
                                          └──────────────┘
 Gl Account Password:                     ┌──────────────┐
 ┌────────────────────────────────────┐   │    Cancel    │
 │ ****************                     │   └──────────────┘
 └────────────────────────────────────┘
                                          ┌──────────────┐
                                          │     Help     │
                                          └──────────────┘
```
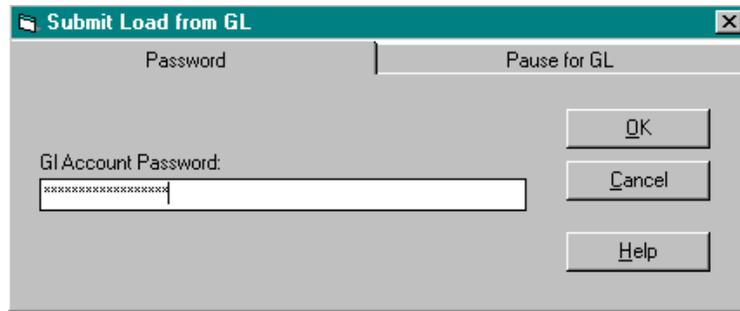
6. To manually load extractions from General Ledger to Financial Analyzer, enter the password for the GL account in the Password tab and choose **OK**.

   The GL account password is the password for the APPS account.

   **Note:** The GL account password is *not* the same as the password you enter when you login to General Ledger. If you are not sure of the password, contact your General Ledger System Administrator.

   A message box appears indicating that the request to load data has been submitted to the task processor.

   After the task has been submitted, the Task Processor can be run at the appropriate time to load any data extracted from General Ledger. Depending on how your Financial Analyzer system has been set up, the task processor can be run from within your Administrator workstation or from a Task Processor workstation.

   See the *Oracle Financial Analyzer User's Guide* for more information on running the task processor.

   **Note:** When manually loading extractions, you must wait for all extractions in General Ledger to complete before running the Task Processor to load them into Financial Analyzer.

7. You may select the automatic load option to automatically load extractions to Financial Analyzer when the General Ledger extraction process has completed. This allows you to schedule the load process in the Task Processor queue in Financial Analyzer, as well as schedule other tasks (i.e. solves) to be performed after the General Ledger load has completed.

To select the automatic load option:

a. In the Submit Load Request dialog box, select the Pause for GL tab and check the **Pause for GL extracts to complete** check box.
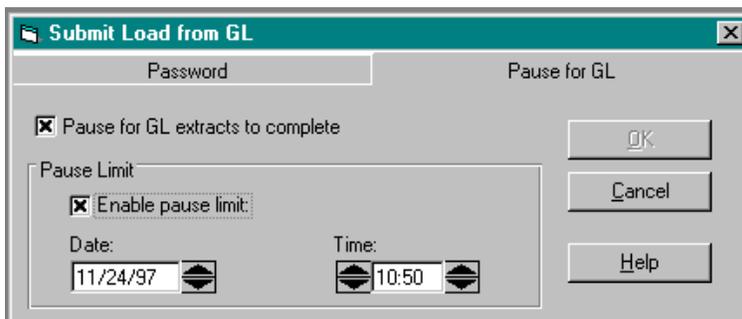


b. You may optionally pick a time to cancel the automatic load process by checking the **Enable pause limit** check box and selecting the date and time to return control to the Task Processor.

c. Enter the password for the host computer GL account and choose **OK** on the Password tab to submit the task.

When the Task Processor is started and begins to process the task to load data from General Ledger, it will pause and display the message, "Pausing to Look for the Load Analyzer Extraction." This message will be displayed until the Task Processor detects the completion of the Load Extracts program in General Ledger. It will then load all extractions preceding the Load Extracts program when they have completed processing. If the **Enable pause limit** check box was selected, the Task Processor will cancel the load request in Financial Analyzer when the time limit is reached if it fails to detect the Load Extracts program in General Ledger.

**Note:** If you select the automatic load option, the Task Processor will pause when it encounters the submit load request task if the GL extract is not completed. Subsequent submitted tasks will queue up behind the submit load request task until that task is run or the pause limit comes into effect.

After the Task Processor has been run and the data loaded into the shared database, your extraction requests will be updated in General Ledger with a "Loaded" status. The Load Extracts request will be updated with a "Launched" status.

Once the data is loaded, you can refresh any new General Ledger structures in your Administrator workstation.

8. In the Administrator workstation, from the Manage menu, return to the Oracle General Ledger Interface cascading menu and choose **Refresh GL Structures**.

If no new structures have been extracted and loaded from General Ledger to Financial Analyzer, a message box indicates that there are no new structures to refresh. Choose **OK** to close the message dialog box and return to your work session.

If there are new structures to refresh, the Refresh GL Structures dialog box appears.
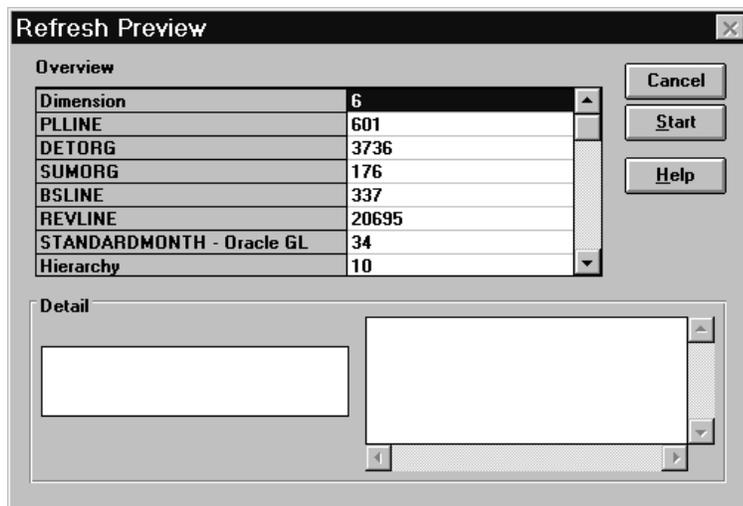
This dialog box shows you how many items are waiting to be refreshed.

The Overview area box displays a table in which the names of the database objects being refreshed are displayed down the left-hand side and the number of values to be refreshed for each database object are shown down the right-hand side. The Detail area box displays information about the objects being refreshed.

☐   If you want to see the names of the items waiting to be refreshed, select a cell that contains a number. The names of the corresponding items are listed in the left-hand side of the Detail area box.

☐   If you want to see a description of a specific item on the list, select the item. A description of the item appears in the right-hand side of the Detail box.

9.  To bring the new structures in to your database, choose **Start**.

10. A status dialog box indicates that the structures are being refreshed. You can cancel the operation while it is in progress by choosing the **Cancel** button.

11. When the operation is complete, choose **OK** to close the status dialog box and return to your work session.

12. If you have loaded a balance or hierarchy extract and you want to update your data based on new or changed balances or hierarchical

changes, run a solve or group solve definition on the appropriate financial data items.

You can now use your data in Financial Analyzer for financial reporting, analysis, budgeting, and planning.

# Creating Dimension Values for Segment Values with No Existing Balances

When you import General Ledger data into Financial Analyzer, dimension values are created for only those segment value combinations that are associated with balances at the time the data is loaded. Dimension values are not created for segment values that are not associated with balances at the time the structures and data are imported. If you need to enter data for these segment values as part of a budgeting process, you can create dimension values for them after they have been loaded into Financial Analyzer.

**To create dimension values for segment values with no existing balances:**

1. From the Manage menu, choose **General Ledger Interface**. A cascading menu appears.

2. From the cascading menu, choose **Add GL Dimension Values**. The Add GL Dimension Values dialog box appears.
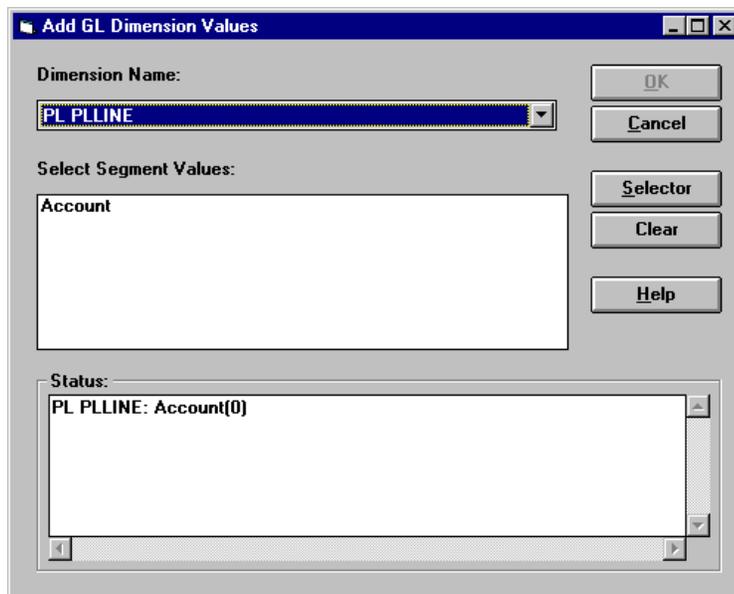
3. In the Dimension Name box, select the dimension to which you want to add the new dimension values.

    You can select the default dimension that appears in the box, or you can click on the arrow at the right of the box to display a list of alternate dimension names, from which you can choose.

    The segments that are associated with the current dimension appear in the Select Segment Values box. The number of values currently selected for each value is reflected in the Status box.

4. In the Select Segment Values box, double-click on a segment.

    *or*

    Select a segment and choose **Selector**.

    The Selector dialog box appears.

```
Selector                                                              ✕
Dimension:                      Hierarchy:
Account (0 selected)        ▼   (None)              ▼        [ OK ]

Select Using                                               [ Cancel ]
◉ List        ○ Tool        ○ Saved Selection
                                                            [ Help ]
Account List                           Selected Accounts
┌────────────────────────────┐        ┌────────────────────────┐
│ 0000 Unspecified         ▲ │        │                        │
│ 0100 Open                  │  [ >> ]│                        │
│ 0150 Open                  │        │                        │
│ 0200 Open                  │  [ << ]│                        │
│ 0250 Open                  │        │                        │
│ 0300 Open                  │        │                        │
│ 0350 Open                  │        │                        │
│ 0400 Open                  │        │                        │
│ 0450 Open                  │        │                        │
│ 0900 Headcount parent      │        │                        │
│ 1010 Petty Cash            │        │                        │
│ 1015 ORE Cash - Wells Fargo MM │    │                        │
│ 1020 Int'l Subsidiary Cash │        │                        │
│ 1025 Cash - Nations Bank ITG ▼ │    │                        │
│ ◄                       ►  │        │ ◄                   ►  │
└────────────────────────────┘        └────────────────────────┘
 0 highlighted, 2573 visible, 2573 available   0 selected, 0 highlighted

                                       [ Sort... ]    [ Save... ]
```

5. In the Dimension box, select a segment for which you want to create one or more dimension values.

   You can select the default segment that appears in the box, or you can click on the arrow at the right of the box to display a list of alternate segments, from which you can choose.

   The values associated with the selected segment appear in the Available box. The Available box is located on the left-hand side of the Selector dialog box and is labeled with the name of the current segment.

6. Follow the basic steps for selecting data to move values between the Available and Selected box until the Selected box contains the segment values for which you want to create dimension values.

7. Repeat Steps 5 and 6 until you have selected values for all segments in the Dimension box.

   **Note:** You must select values for all of the segments in the Dimension box. If you do not select values for all segments, the **OK** button does not become active, and you cannot save the selections you have made for any of the segments.

8. Choose **OK** to close the Selector dialog box. The Add GL Dimension Values dialog box is again visible on your screen. The status box reflects the number of values you selected for each segment.

   **Note:** When you have selected the segment values for which you want to create dimension values, the Dimension Name box becomes dimmed, preventing you from selecting another dimension at this time. You can add General Ledger dimension values to only one dimension at a time.

9. Choose **OK** to create the dimension values and add them to the current dimension.

   The Add GL Dimension Values dialog box remains on your screen, enabling you to add General Ledger dimension values to another dimension.

10. When you have completed the task of adding dimension values to the appropriate dimensions, choose **Cancel** to close the Add GL Dimension Values dialog box.

11. Refresh the structures in your shared database using the instructions (beginning with Step 8) in the "Loading Financial Data" section earlier in this chapter.

# Maintaining Loaded Data Objects

All data objects loaded from General Ledger are assigned a library type of GL in the Super Administrator workstation. The super administrator cannot change certain settings or access certain functionality for these objects. Once these database objects are distributed to subordinate administrators and users, they are assigned a library type of DBA and have the same components and functionality as other data objects distributed by the super administrator. This section outlines the restrictions for objects loaded from General Ledger.

See the *Financial Analyzer User's Guide* for more information on maintaining database objects.

# Line Item Dimensions

Dimensions that include the General Ledger natural account segment as part of their definition are identified as line item dimensions in Financial Analyzer. When line item dimensions are created in Financial Analyzer, the following settings are specified as part of the dimension definition. These are settings that can be viewed in the Dimension Supports and Defined By boxes in the Maintain Dimension dialog box.

**Note:** These settings cannot be changed by the super administrator.

- The following settings, which specify additional functions for the line item dimension, are supported:
  - □ Time aggregation
  - □ Better/Worse indicators
  - □ Maintaining DBA sort order
- The following settings, which specify who can define additional objects based on the line item dimensions, are specified:
  - □ For hierarchies — **EveryOne**
  - □ For models — **EveryOne**
  - □ For attributes — **EveryOne**

The super administrator can perform the following operations on line item dimensions loaded from General Ledger:

- Rename the line item dimension
- Delete the line item dimension

# Other Dimensions

The following settings are specified as part of the dimension definition for all other dimensions loaded from General Ledger. These are settings that can be viewed in the Dimension Supports and Defined By boxes in the Maintain Dimension dialog box.

**Note:** These settings cannot be changed by the super administrator.

- The following settings, which specify additional functions for the line item dimension, are supported:
  - Maintaining DBA sort order
- The following settings, which specify who can define additional objects based on the line item dimensions, are specified:
  - For hierarchies — **EveryOne**
  - For models — **EveryOne**
  - For attributes — **EveryOne**

The super administrator can perform the following operations on all other dimensions loaded from General Ledger:

- Rename the dimension
- Delete the dimension

# Dimension Values

The super administrator cannot perform the following operation on any dimension values loaded from General Ledger:

- Delete dimension values

The super administrator can perform the following operations on dimension values loaded from General Ledger.

- Change row and column labels
- Add new dimension values
- Move dimension values
- Rename dimension values

# Financial Data Items

The following settings are specified as part of the dimension definition for all financial data items that are loaded from General Ledger. These are settings that can be viewed in the New Financial Data Item dialog box.

**Note:** These settings cannot be changed by the super administrator.

- For financial data item type — **Stored**
- For data type — **Decimal**

The super administrator can perform the following operations on all financial data items loaded from General Ledger:

- Use Profile to Solve to specify the financial data item as part of a solve definition that is run automatically when a user submits data to the shared database
- Add new financial data items
- Delete financial data items
- Move financial data items
- Rename dimension values

# Hierarchies

The super administrator cannot perform the following operation on any hierarchies loaded from General Ledger:

- Edit hierarchies

The super administrator can perform the following operations on all hierarchies loaded from General Ledger:

- View hierarchies
- Add new hierarchies
- Delete hierarchies
- Move hierarchies
- Rename hierarchies

# Chapter 6

# Writing Budget Data Back to General Ledger

You can use Financial Analyzer's Write Budget to GL feature to transfer budget data prepared in Financial Analyzer directly to General Ledger, provided the data structures originated in General Ledger.

This feature uses the Task Processor to take data from the Super Administrator shared database in Financial Analyzer and write it to the budget interface table in General Ledger.

You then upload the data from the budget interface table into the balance tables. You can specify a setting in Financial Analyzer to automatically trigger the budget upload process, or you can manually initiate this process from within General Ledger.

In Financial Analyzer you choose a financial data item that contains budget data and specify the slice of data that you want to write back. For segments that are not mapped to dimensions, you must specify a segment fill value, into which the budget data will be written in General Ledger.

# Exporting Budget Data from Financial Analyzer

This section describes how you can write the budget data you prepared in Financial Analyzer directly to General Ledger. This process includes:

1. Specifying budget data to write back

2. Specifying segment fill values

3. Mapping summary segment values

4. Specifying a method for writing budget data back

**Note:** Only financial data items that contain budget data and that were created in General Ledger are available for writing back to General Ledger.

## Specifying Budget Data to Write Back

**To specify the budget data to write back to General Ledger:**

1. From the Manage menu, choose **General Ledger Interface**.

   A cascading menu appears.

2. From the cascading menu, choose **Write Budget to GL**.

   The Write Budget to GL dialog box appears.
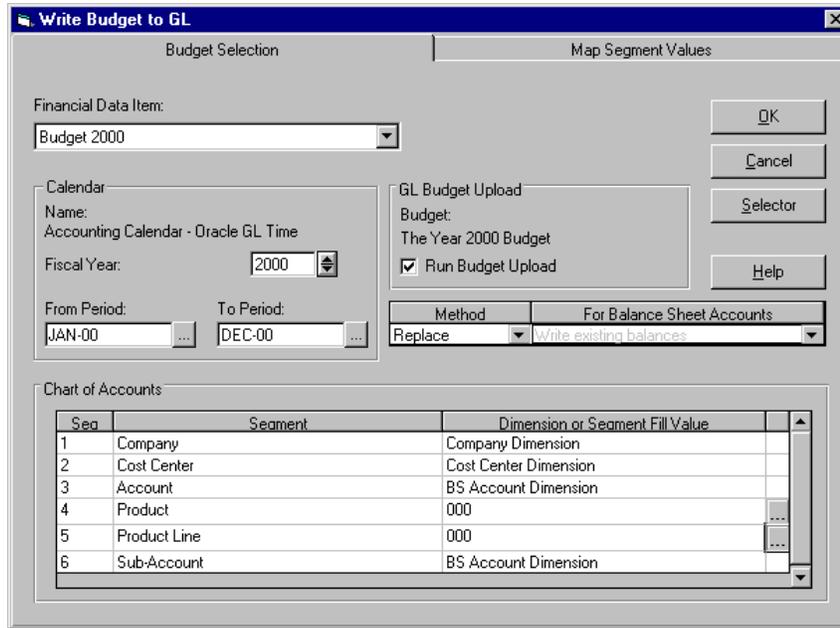
3. Select the Budget Selection tab.

4. In the Financial Data Item box, select the financial data item that contains the budget data that you want to write back to General Ledger.

   The dimensions associated with the financial data item appear in the column on the right of the Chart of Accounts box.

   **Note:** If you select a financial data item which contains balances in both your Functional and Statistical currency, a Functional/Statistical Data Writeback box will appear to the right of the Financial Data Item box. This option enables you to write back your budget data in the functional currency or statistical currency.

   Provided that separate account segment values were used for the functional and statistical balances, you can select the accounts with functional balances in the Selector and choose the functional currency option in the Functional/Statistical Data Writeback box to write functional currency balances to General Ledger.

Then, you can perform a second writeback task and select the accounts with statistical balances in the Selector, choose the statistical currency option in the Functional/Statistical Data Writeback box, and write statistical currency balances to General Ledger in the statistical currency.

5. In the Fiscal Year box, select a year.

   **Note:** This year determines the set of time periods that are available for selection when you select the data slice to write back.

6. In the From Period and To Period menus, select a contiguous range of time periods for the time dimension. You can manually enter the period or click on the Ellipsis button ([⋯]) to access the Choice List dialog box, which provides a list of available time periods for the fiscal year selected. The time dimension will not appear in the Selector since you select your time dimension values here.

7. Select the slice of data that you want to write back to General Ledger using the following steps:

   a. Choose **Selector**.

      The Selector dialog box appears. The dimensions associated with the current financial data item appear in the Dimension box.
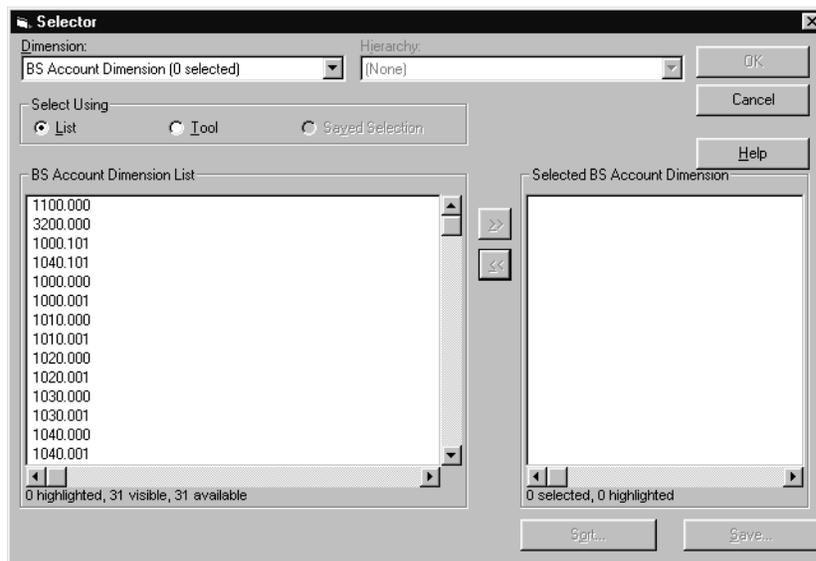


   b. In the Dimension box, select a dimension.

You can select the default dimension that appears in the box, or you can click on the arrow next to the box to reveal a list of the other dimensions related to the current financial data item, from which you can choose.

The values associated with the selected dimension appear in the *Available* box. The *Available* box is located on the left side of the Selector dialog box and is labeled with the name of the current dimension.

c.  Follow the basic steps for selecting data to move values between the *Available* and Selected boxes until the Selected box contains the values that you want to write back from the selected dimension to General Ledger.

d.  Repeat Steps b and c until you have selected values for each of the dimensions in the Dimension box.

   **Note:** You must select values for all of the dimensions in the Dimension box. If you do not select values from all the dimensions, the **OK** button does not become active, and you cannot save the selections you have made for any of the dimensions.

e.  Choose **OK**.

   The Selector dialog box closes. The Write Budget to GL dialog box is again visible on your screen.

For detailed information about how to use the Selector dialog box search for the following topic in the Financial Analyzer Help system:

   "Selecting Data"

# Specifying Segment Fill Values

For segments that are not mapped to dimensions, you must supply segment fill values in the Chart of Accounts box.

---

**Note:** When segments are not mapped to dimensions, the aggregated budget amounts associated with the segment are loaded into Financial Analyzer. When writing budget data back, selecting a Segment Fill Value allows you to write the aggregated budget amounts back to detail accounts in General Ledger, since you can only enter budget data against detail accounts in General Ledger.

Therefore, you should reserve a group of detail accounts for the segments not mapped to dimensions in your General Ledger budget to which you can write summary budget amounts. This procedure will enable you to maintain summary budget information in General Ledger.

---

**To specify segment fill values:**

1. In the Dimension or Segment Fill Value column, select a cell for which there is no dimension.

2. Click on the Ellipsis button ([...]) to access the Choice List dialog box, which provides a list of segment fill values from which you can choose.
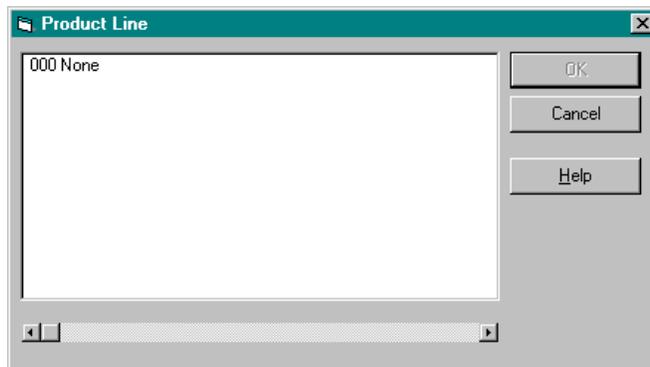


3. Select a value and choose **OK**.

   The value appears in the selected cell of the Dimension or Segment Fill Value column.

4. Repeat Steps 1 through 3 for each segment that does not contain a corresponding dimension.

# Mapping Summary Segment Values

For summary financial data items, Financial Analyzer loads the summary account segment values and the aggregated data associated with them. If you use a summary financial data item as the basis for your budgets in Financial Analyzer and you want to write the budget amounts back to General Ledger, you must write the budget amounts back to detail accounts in your General Ledger budget. Therefore, you should reserve a group of detail accounts in your General Ledger budget to which you can write summary budget amounts. This procedure will enable you to maintain summary budget information in General Ledger.

**Note:** When you define a summary financial data item in General Ledger, you must assign a summary template to the financial data item. General Ledger uses summary templates to create corresponding summary accounts which are used only to aggregate data from detail accounts. You cannot post journals or enter budget data directly against summary accounts. You may only post journals and enter budget data against detail accounts.

If you are working with a summary financial data item, you must supply segment mappings from summary segment values to detail segment values for each summary dimension using the following steps:

**To map summary segment values to detail segment values:**

1. Select the Map Segment Values tab.
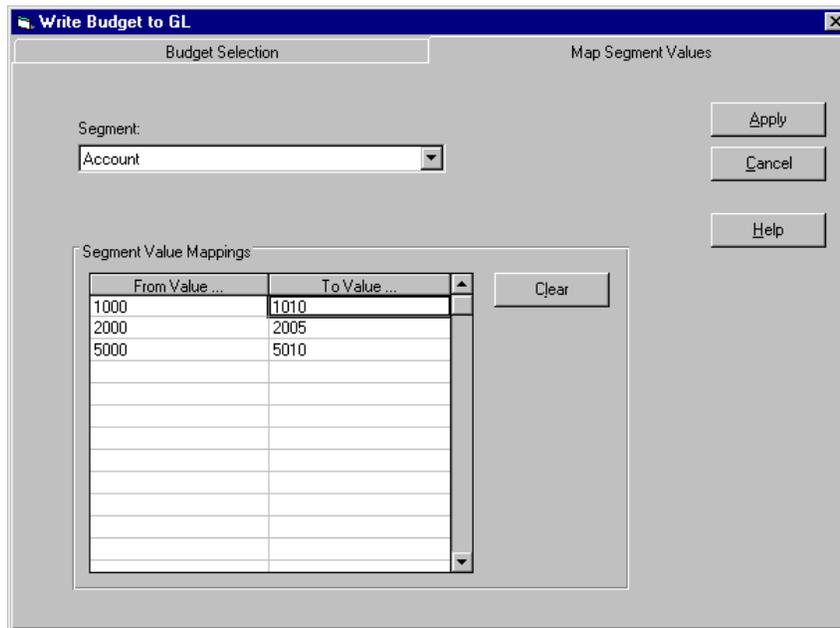


2. In the Segment box, select a summary dimension.

3. In the Segment Value Mappings box, select a cell in the From Value column.

4. Type the summary segment value you want to map into the cell

   *or*

   a.  Double-click on From Value to access the Choice List dialog box.

   b.  Select a value.

   c.  Choose **OK**.

5. In the Segment Value Mappings box, select the associated cell in the To Value column.

6. Type a detail segment value into the cell

   *or*

   a.  Double-click on To Value to access the Choice List dialog box

    b. Select a value

    c. Choose **OK**.

7. When you have mapped the summary segment value to its related detail segment value, choose **Apply** to write the mappings to the database.

   If you want to remove mappings from one or more cells, select those cells and choose **Clear**.

   **Note:** If you have already applied the mappings that you want to clear, you must choose **Apply** after choosing **Clear** to remove the mappings from the database.

8. Repeat Steps 3 through 7 for each pair of mappings that you need to provide for the selected summary dimension.

9. Repeat Steps 2 through 7 for each summary dimension in the financial data item.

10. When you have completed the segment value mappings, return to the Budget Selection tab.

# Specifying a Method for Writing Budget Data Back

Use the options available in the Method box and the For Balance Sheet Accounts box to specify how you want Financial Analyzer to write your budget data back to General Ledger.

To specify a method for writing budget data back, click on the arrow in the Method box and the For Balance Sheet Accounts box to display lists of available options.

The following table describes the different options available.

**Note:** Balance sheet accounts are those accounts that have asset, liability, or owners equity account types assigned to them in General Ledger. Non-balance sheet accounts are those accounts that have revenue or expense account types assigned to them in General Ledger.

| Method | For Balance Sheet Accounts | Action / Description |
|---|---|---|
| Replace | Write period change in balances | This option is suggested when the balance sheet account balances stored in Financial Analyzer for each period represent year-to-date balances. |
| | | For the balance sheet accounts you selected, the budget balance stored for each period in Financial Analyzer will be used to calculate the balance representing the activity that occurred during the period. The calculation takes the stored budget balance for a selected period and subtracts the prior period budget balance to arrive at the activity that occurred during the period, which is then written back to General Ledger, overwriting the existing balances. This allows General Ledger to maintain the balance representing the activity in a period, as well as aggregate the activity for multiple periods in year-to-date balances. |
| | | For non-balance sheet accounts selected, the budget balances stored in Financial Analyzer will be uploaded directly to General Ledger and will overwrite the existing balances. The Method menu automatically defaults to **Replace** when **Write Period Change in Balances** is chosen in the For Balance Sheet Accounts menu. |
| Replace | Write existing balances | This option is suggested when balance sheet account balances stored in Financial Analyzer for each period represent activity for the period. For the balance sheet and non-balance sheet accounts you selected, the budget balances stored in Financial Analyzer will be uploaded directly to General Ledger and will overwrite the existing balances. |
| Increment | Write existing balances | For the balance sheet and non-balance sheet accounts you selected, the balances stored in Financial Analyzer will be uploaded directly to General Ledger and will increment the existing period balances. |

| Method | For Balance Sheet Accounts | Action / Description |
|---|---|---|
| Replace | N/A | The non-balance sheet account balances stored in Financial Analyzer will be uploaded directly to General Ledger and will overwrite the existing balances. |
| Increment | N/A | The non-balance sheet account balances stored in Financial Analyzer will be uploaded directly to General Ledger and increment the existing balances. |

You can use more than one of the methods described above to write back the budget data in a financial data item. For example, if you want to use the **Replace** — **Write Period Change in Balances** combination to write back the balance sheet account balances, and use the **Increment** method to write back the non-balance sheet account balances, you can perform two separate budget writeback tasks and use the Selector each time to select the specific accounts to which to apply the method for writing back data.

# Submitting a Task to Write Budget Data to General Ledger

▮▷ **To automatically update balances in General Ledger**

1. Before you write to the Budget Interface Table, select the **Run Budget Upload** option on the Budget Selection tab of the Write Budget to GL dialog box.

   **Note:** If you do not select this option, you must run the budget upload process separately in General Ledger after the budget data is written to the Budget Interface Table. For more information about how to perform this process, refer to the *Oracle General Ledger User's Guide*.

2. Choose **OK** on the Budget Selection tab of the Write Budget to GL dialog box.

3. If you selected balance sheet accounts, a message box will appear for you to confirm your selections. Choose **No** to make changes to your

selections or **Yes** to continue. If you choose **Yes**, the Submit Budget Request dialog box appears.

4. In the GL Account Password box, enter the password for the GL account.

   **Note:** This is the same password that you supply when you submit a load request.

5. Choose **OK**.

   A message box appears, informing you that your request has been submitted to the Task Processor.

6. Access the Task Processor and process the task you created.

See the *Oracle Financial Analyzer User's Guide* for more information on the task processor.

# Chapter 7

# Technical Reference

This chapter provides the following technical information:

- A technical overview of the integration process
- A description of the flow of the data load process
- A discussion of individual issues to consider during implementation
- A list of task processor error messages with explanations
- A list of frequently asked questions with answers

# Technical Overview

The following diagram illustrates the transfer process from General Ledger to Financial Analyzer.



**Data Transfer from General Ledger to Financial Analyzer**

**General Ledger**

**RG_DSS_REQUESTS table**

**Hierarchy, Currency, Rates, and Calendar tables**

**Balances and Segment Value tables**

1. GL inserts a row in the RG_DSS_REQUESTS table for each extraction request

3. OFA loads data from GL tables, based on the info in the RG_DSS_REQUESTS table

2. GL writes data to temporary files

Temp Files

4. OFA loads data from temporary files

**Financial Analyzer**

As shown in the preceding diagram, the transfer is comprised of the following steps:

1. **GL inserts a row in the RG_DSS_REQUESTS table for each extraction request**

   The concurrent manager processes each extraction request. When the concurrent process completes, the concurrent manager inserts a row in the RG_DSS_REQUESTS table. This row includes the type of extraction request (balances, segment values, calendar, etc.) and the associated parameters.

2. **GL writes data to temporary files**

   The Balance and Segment Value extraction requests write data from the General Ledger tables to temporary files. The concurrent manager creates the temporary files on the machine on which it is running.

3. **OFA loads data from GL tables, based on the data in the RG_DSS_REQUESTS table**

   Financial Analyzer reads data from the RG_DSS_REQUESTS table to determine exactly which General Ledger data to load. Thus, Financial Analyzer needs to be able to read data from General Ledger database tables. To enable Financial Analyzer to read data from General Ledger database tables, you need to set some environment variables in the script that starts Express.

   See Chapter 2 of this document for more information on these environment variables.

4. **OFA loads data from temporary files**

   Based on the information in the RG_DSS_REQUESTS table, Financial Analyzer loads balance and segment value data from the temporary files. Thus, Financial Analyzer needs to be able to read the temporary files created during the extraction.

See Chapter 2 of this document for more information on configuring the Financial Analyzer and General Ledger to load data from the temporary extraction files.

# The Data Load Process

This section describes the flow of the data load process and the error messages that are displayed if the data load is interrupted. The information in this section will help you assess any problems that arise and help you restart the data load at the appropriate point in the process.

# Request Processing

Data and structures are loaded from General Ledger based on the last successfully completed extraction request. Financial Analyzer recognizes seven different extraction requests. The processing action taken by Financial Analyzer depends on the status of the extraction request, the extraction start date entered in General Ledger, and the extraction type's

position in the processing order. A request may be processed individually or as part of a request set. The order of processing is very important and is managed internally. The table below lists the seven types of extraction requests and the order in which they would be processed. It is not necessary to include all six types of requests in a request set.

| Request Program Name | Request Type | Comment |
|---|---|---|
| SEGMENT | S | This request defines data structures and is always the first to be processed (unless the automatic load process is selected). Information from this request must be in place for BALANCE and HIERARCHY request processing to take place. The system requires that at least one successful load of Segment has occurred before processing other requests. |
| CALENDAR | P | This request will be processed after SEGMENT. A CALENDAR request must have been processed in order for OFA to allow its corresponding BALANCE request to process. Balances are dependent on time. |
| CURRENCY <br><br> RATES | C <br><br> R | These are processed next. They are dependant on a CALENDAR request being processed and may have values that should be available before BALANCE processing. |
| BALANCE | B | BALANCE is processed after the above list of requests but always before HIERARCHY. BALANCE is the source of financial data balances and new dimension values. HIERARCHY is dependent upon BALANCE to the extent that BALANCE creates the valid set of dimension values that are included in hierarchies. |
| HIERARCHY | H | This request is sequenced to be processed last within a set. CURRENCY, RATES and CALENDAR do not effect it but it must be processed after BALANCE. HIERARCHY will create the hierarchical relationships for the dimension values loaded in BALANCE. |
| LOAD | L | When a Submit Load Request has been submitted with the Pause GL option enabled, Financial Analyzer will look for a completed LOAD extract before starting the load process. When a completed LOAD extract has been found it will process any new extraction run prior to the LOAD extract. |

# Processing Order and Error Handling

General Ledger initially sets the status flag for all requests that it has extracted to **New**. When looking for a request to process, the Financial Analyzer will only consider those requests with a status of **New** or **Extracting**. The eligible requests are sorted in the correct processing order; by request type and the extraction start date.

If the **Pause for GL** option was enabled when the submit load request was issued in Financial Analyzer, then the task processor will wait until it finds an Analyzer Load Extract request with a status of **New** before processing any requests. Upon finding a Analyzer Load Extract request with a **New** status, Financial Analyzer will process any extraction with a status of **New,** that was extracted prior to the Analyzer Load Extract request.

As Financial Analyzer begins processing an extract, the status of the request within General Ledger is set to **Loading** and remains in this state while the request is processed by Financial Analyzer.

Upon the successful completion of the request (the updates completed in Financial Analyzer), the balance or segment files that were created to support the request are deleted and the status of the request is set to **Loaded** within General Ledger

If an error is detected by Financial Analyzer, no data is loaded, an error is logged in Financial Analyzer's task processor, and the status of the request is set to **Error** within General Ledger. All General Ledger load processing is terminated by Financial Analyzer upon detecting an error. The remaining, unprocessed requests are left as they were with a status of **New**. Any completed requests are already tagged with a status of **Loaded** and the request that generated the error is tagged with a status of **Error**.

At this point the error should be resolved and the request submitted for processing again to preserve the correct processing order.

The table below shows the possible values for the processing status flag that are seen in the Transfer Requests report..

| Status Flag | Meaning |
|---|---|
| Extracting | The extract request is being processed by the General Ledger concurrent manager, |
| New | The request has been processed in General Ledger. Financial Analyzer processing has not been started. |
| Loading | The request is currently being processed by Financial Analyzer. For example: BALANCE is in the process of loading but has not yet been completed. |
| Loaded | The request has been successfully completed and an update has occurred in Financial Analyzer. |
| Cancel | The request has been canceled in General Ledger. This can only be done to an extract with the status of New. |
| Error | Financial Analyzer has detected a controlled error during the processing of a request. Determine why the error occurred, correct it, and submit the request again. |
| Launched | The applies only to Analyzer Load Extract requests. The status is set to Launched when Financial Analyzer is processing or has processed the new extracts extracted prior to the Analyzer Load Extract request. |

# Processing Order and Restarting the Data Load

When a request fails, it may or may not be critical to the flow of processing for the General Ledger data load. If the item to be processed is absolutely required (as noted for some request types in the table above) and not resubmitted, the processing of that request set will fail again. However, if the item that failed processing is not critical to the request set, you can still run the Submit Load from GL function from Financial Analyzer again. In this situation, the non-critical request with a status of **Error** will be ignored and the remaining **New** requests will be processed.

For example, if requests of CALENDAR and HIERARCHY were made and the CALENDAR request failed, the failure would have no impact on the HIERARCHY request that could be reloaded by Financial Analyzer. The system will ignore the CALENDAR request with the error status and process the HIERARCHY.

# Balance Log File

When you process a balance request, you can activate a log file that provides details about how each record in the balance extract file is processed when it is loaded into Financial Analyzer.

The balance log file is called `balance.log` and is placed in the default directory for Financial Analyzer temporary files.

The file header provides the following general information about the data contained in the file:

- The name and location of the balance extract file
- The set of books from which the extract file was created
- The balance type
- The version id, if the balance type is budget or encumbrance

The extract file contains a record for each balance in General Ledger for the periods, set of books, and balance type specified during the extract process. When the extract file is processed, the balance log file logs the following information about each record as it is processed:

- The following identifying information for each record:
  - The record number
  - The time period
  - The currency
  - The balance type
  - The version ID
  - The translation flag
  - The balance, which is the period movement or closing balance, dependent on account type
  - The segment values related to the balance.
- Whether the balance for the financial data items in the financial data set for the set of books and balance type identified during the extract was assigned or ignored

- Information about why a financial data item was ignored, if it was ignored

- Whether the appropriate cells in the financial data item were set to NA before the first record for the specified period in the extract file was assigned to it

- Information about the dimension values that are mapped to the segments and the value in the financial data item before and after the assignment, if a balance was assigned to the financial data item

**To activate the balance log file:**

1. From the Tools menu, choose **Options**.

    The Application Options dialog box appears.

2. Choose the **General** button.

    The set of general Financial Analyzer options appears.

3. Select the **Create Balance Request Log** option.

4. The current setting for this option appears in the edit bar.

    **Note:** If the current setting is **Yes**, the balance log file is already activated.

5. Click on the arrow in the edit bar to reveal the list of settings you can select.

6. Select **Yes**.

    The list of settings closes, and the **Yes** setting is visible in the edit bar and in the settings table.

7. Choose **OK** to close the Financial Analyzer Options dialog box.

# Segment Log File

When you process a segment request, a log file is activated that provides details about the segment, dimension and Financial Data Item information defined when the extract is loaded into Financial Analyzer.

The segment log file is called `segment.log` and is placed in the default directory for Financial Analyzer temporary files.

The file contains the following information:

- Details of the Chart of Accounts structure being read into Financial Analyzer

- The Financial Analyzer dimensions that originated from General Ledger and how they map to the segments.

- The Financial Analyzer Financial Data Items that originated from General Ledger and from which set of books they will be populated.

- The details of each segment that has been read into Financial Analyzer. The segment values are listed for each segment.

**Note:** These do not correspond to dimension values present in Financial Analyzer. Dimension values are added during the processing of a balance extract.

# Implementation Considerations

Please refer to the following when you prepare to implement the link between General Ledger and Financial Analyzer:

## Balance Considerations

- You cannot extract balances for more than 30 accounting periods in a single run. If you try, the balance extraction request will not process the request and the status of the request in the View Transfer Requests form will be Error.

- If you run a balance extraction and there are no General Ledger balances for the set of books, balance type, and accounting periods you specified, your balance extraction will not create a temporary extract file. The status of the request in the View Transfer Requests form will be **Error**.

- The maximum length of each row in a balance extract file is 498. If this limit is exceeded, the balance load program will fail and the status of the request in the View Transfer Requests form will be Error.

# Time Considerations

- Financial Analyzer creates a time dimension is based on your accounting calendar in General Ledger, and is required for every financial data item you create. Financial Analyzer creates a custom time dimension and does not use the standard OFA Time dimension.

- Financial Analyzer names your GL Time dimension GLTIME*n*, where *n* is a number. You could have more than one Time dimension if you load financial data from more than one set of books with different accounting calendars.

- Financial Analyzer creates dimension values and descriptions for your Time dimension based on your General Ledger accounting periods. Each dimension value will start with a "P" followed by an accounting period name. Each dimension value description will match an accounting period name. Financial Analyzer uses the dimension values internally, but displays the dimension value descriptions.

- Financial Analyzer assumes in standard time calculations that all components within a month, quarter, or year are equivalent. For example, each month within a quarter represents one third of that quarter.

# Dimension Considerations

The following considerations apply to names, values, and descriptions of dimensions (other than Time):

- Financial Analyzer adds values to dimensions that are mapped to segments, during the balance load. A value will only be added to a dimension when there is a balance associated with the segment value and this has been extracted during the balances load request.

- Financial Analyzer converts all segment values to uppercase when creating dimension values. Therefore, you should make sure you do not have 2 segment values that are different only in their case (e.g., AB200 and ab200).

- The maximum length for a dimension value (both single and multi-segment dimensions) is 256.

- The maximum length for a dimension description (both single and multi-segment dimensions) is 498.

- Financial Analyzer separates segment values with a period ("." ) when creating multiple-segment dimension values.

- Financial Analyzer replaces embedded spaces within dimension values with an underscore character ("_").

- Dimensions should not be mapped to dependant segments in the General Ledger.

**Example:**

| Segment: | **Company** | Segment: | **Cost Center** |
|---|---|---|---|
| Value: | **100** | Value: | **200 A** |
| Description: | **Services** | Description: | **Service O/H** |

| | |
|---|---|
| Dimension: | **Org (Company and Cost Center)** |
| Prefix: | **A** |
| Row Label: | **Value** |
| Column Label: | **Description** |
| Selector Label: | **Both** |

In Financial Analyzer, you would see the following:

| | |
|---|---|
| Value: | **A100.200_A** |
| Row Label: | **100.200_A** |
| Column Label: | **Services.Service O/H** |
| Selector Label: | **100.200_A Services.Service O/H** |

# Filter Evaluation Considerations

- Financial Analyzer evaluates filters as follows:

  □ All segment values in an exclude range are rejected

  □ Any remaining values in one or more include ranges are accepted

  Thus, Financial Analyzer only loads segment values which are in at least one include range and not in any exclude range.

- Filter evaluation applies only to leaf values.

- For a filter to be effective for a dimension mapped to a financial data item, you must assign a filter to the dimension. For a filter to be effective for a financial data item as a whole, you must not map a dimension that includes the filtered segment to the financial data item.

# Period Rate Considerations

- When you extract and load period rates, Financial Analyzer will automatically create or update the currency dimension. This will happen whether or not you explicitly run a currency extraction. Currently, the currency dimension is used only in connection with period rates.

# Hierarchy Considerations

- If you enter a root node that has no children, Financial Analyzer will build an empty hierarchy. That is, the hierarchy will be defined but there will be no parent/child relations present. There are two reasons a root node might have no children:

    1. There are no child values defined in General Ledger.

    2. Your filters exclude all child values for that root node.

- Financial Analyzer requires that for a given hierarchy, each child has one and only one parent. Therefore, if you define a hierarchy in General Ledger that has a child rolling up into multiple parents, Financial Analyzer considers only the parent that is encountered first as the parent for that child value. Different hierarchies, however, can have the same child value roll up into different parents.

# Financial Data Set Considerations

- You define a financial data set for your current chart of accounts. You cannot define more than one financial data set for a chart of accounts.

- Each Financial Analyzer installation is tied to one financial data set. This cannot be changed.

# Task Processor Messages

The following is a list of specific error messages that can occur in the
Financial Analyzer task processor and their meaning:

- **You can not change the GL system. Please continue to
  use Financial Data Set name.**

  The system name must be set and correspond between General Ledger
  and Financial Analyzer. After the first successful load of a SEGMENT
  request the Financial Data Set is established and cannot be changed.
  During the subsequent connection attempts, if the names do not
  correspond, the systems will not connect and the task ends. Correct the
  Financial Data Set name and restart the load process.

- **Failed to successfully start Oracle GL.**

  When a request is sent to the task processor to download General
  Ledger data, Financial Analyzer must start General Ledger to access
  information. This message is generated if that startup cannot be
  successfully accomplished and the task ends. The reason for the
  inability to start General Ledger should be investigated. Possible causes
  include:

  - General Ledger is not running

  - There is a problem with the SQL*Net connection between Express
    Server and RDBMS

  - The password you entered in the GL Access Settings dialog box
    was incorrect

- **GL.SET.REQUESTS: RG_DSS_SYSTEMS was not FROZEN.**

  Extraction Requests can not be processed when the General Ledger
  system is not frozen. The frozen status is controlled by the user within
  General Ledger. In Financial Analyzer, the execution of a task, even
  with an error condition, is considered to complete that task. The
  administrator will need to select **Oracle General Ledger Interface**
  from the Manage menu and then select **Submit Load from GL...** to run
  the task again.

- **There are no new extraction requests from the GL.**

  Financial Analyzer has scanned the request table and has found no new (N) requests to process. There is no data to load. This is normal. The task ends with no update to the General Ledger request table.

- *file name and path*. **Cannot process data extraction. The time dimension is not populated.**

  This error will occur when a BALANCE request is made and the Accounting Calendar for the balance file being processed has not been loaded into Financial Analyzer. Run the appropriate CALENDAR request, select **Oracle General Ledger Interface** from the Manage menu in Financial Analyzer and then select **Submit Load from GL...** to run the task again.

- *file name and path*: **Cannot open the file.**

  Financial Analyzer could not access balance file name and path. The file specification is probably not correct. Investigate the cause then submit the General Ledger request again and reprocess.

- **ERROR: Unix I/O error on file** *file path and name*: **No such file or directory.**

  When Financial Analyzer tried to read the extracted Segment file, the file name or path was not found. The name or path is incorrect or the file no longer exists. Investigate the cause then submit the General Ledger request again and reprocess.

The following is a list of more general error messages and their meaning. The formats for these messages are common to a variety of programs involved in the process of loading General Ledger data.

- *program name* **is not able to declare a cursor for table name.**

  *and*

- *program name* **is not able to fetch from table name.**

  Both of these error conditions should be very rare. They mean that the program specified in program name that was being executed from Financial Analyzer was not able to access the table specified in table name in General Ledger. This indicates that a necessary value was not found when attempting to read a table in General Ledger. No update

takes place in Financial Analyzer. The condition must be resolved and the current request submitted from General Ledger to be reprocessed by Financial Analyzer.

■ ***program name -- Express Server error message.***

During the execution of an Express program the "program name" encountered error "error message". The task terminated at the point the error occurred. The request did not result in an update in Financial Analyzer. The error condition must be resolved and the request submitted from General Ledger again. You can then download the data again in Financial Analyzer.

# Frequently Asked Questions

**Q:** When I load General Ledger data into Financial Analyzer, I am prompted to enter "GL Account", "GL Account Password", and "Financial Data Set". What should I enter here?

**A:** "GL Account" and "GL Password" are the account and password for the ORACLE account that has access to required General Ledger tables. You should use the APPS account and password. This gives you the correct access to the tables in General Ledger from which Financial Analyzer needs to select.

---

**Note:** This is *not* the signon information you use to login to General Ledger.

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The Financial Data Set is the group of financial data items, or variables, you want to load into Financial Analyzer. You define a financial data set using the Financial Data Set form in General Ledger. When you load data into Financial Analyzer, type the name of your financial data set.

**Q:** Does Financial Analyzer load data for all General Ledger accounts, or only for those accounts with associated balances?

**A:** Financial Analyzer only loads data for General Ledger accounts with associated balances. For example, if you define a new cost center in General Ledger, but there are no balances associated with this cost center, Financial Analyzer will not create a dimension value for this cost center or load any data for this cost center.

You can automatically create the appropriate dimension value(s), for example, if you want to budget to your new cost center

See the section "Creating Dimension Values for Segment Values with No Existing Balances" in Chapter 5 of this document for more information.

**Q:** Can my financial data set include balances from more than one set of books?

**A:** Yes. Each financial data item in a financial data set can reference balances from a different set of books. However, all sets of books must share a single chart of accounts. The relationship between charts of accounts, sets of books, financial data items, and financial data sets is as follows:

- Each set of books is associated with a chart of accounts

- Each financial data item references the balances from a set of books

- A financial data set is comprised of one or more financial data items. Each financial data item can reference a different set of books, but all referenced sets of books must be associated with the same chart of accounts

**Q:** What if my load completes but I do not see any data?

**A:** If you do not see any data in Financial Analyzer after refreshing structures and data, check your filters. You need to be careful when defining filters, as it is easy to accidentally exclude all segment values. Follow these rules when defining filters:

- All segment values in an exclude range are rejected

- Any remaining values in one or more include ranges are accepted

Thus, Financial Analyzer only loads segment values that are in at least one include range and not in any exclude range.

---

**Note:** Filters are used to limit the data that is transferred to Financial Analyzer. For example, you would use a filter if you only want to transfer data for a subset of your cost centers. If you want to transfer data for all cost centers, you do not need to use a segment range set for the cost center segment.

---

**Q:** Do I need to solve data after processing a balance extract?

**A:** Yes. The balance load brings data into the Financial Analyzer system at the leaf level. To see data at aggregate levels, you need to solve the data after balance data is loaded.

**Q:** Into which database is data loaded in Financial Analyzer?

**A:** All data and structures are loaded into the super administrator's shared database. After a load request has completed and new structures (dimensions, dimension values, financial data items, hierarchies) added, the super administrator must refresh these structures into the personal database.

**Q:** Are year-to-date or period balances loaded into Financial Analyzer?

**A:** For revenue and expense account types the period balance is loaded into Financial Analyzer. For asset, liability, and owners' equity account types, the year-to-date balance is loaded.

**Q:** What signage will balances carry after they are loaded into Financial Analyzer?

**A:** All debit balances associated with asset and expense account types are shown as positive values, and all credit balances associated with revenue, liability, and owners' equity account types are shown as positive values.

# Glossary

**accounting calendar**

The calendar which defines your accounting periods and fiscal years in General Ledger. You define accounting calendars using the Accounting Calendar form (Standard path: Setup Financials Calendar Periods). Financial Analyzer will automatically create a Time dimension using your accounting calendar.

**attribute**

An Financial Analyzer 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.

**chart of accounts**

The account structure your business uses to record transactions and maintain account balances.

**child segment value**

In General Ledger, a detail-level segment value.

**current dimension**

The Financial Analyzer 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 report, graph, or worksheet.

**current object**

The Financial Analyzer 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.

**DBA library**

If an Financial Analyzer database object belongs to a DBA library, it means that the object was created by an administrator and cannot be modified by a user.

**dimension**

An Financial Analyzer 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 Financial Analyzer 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 values**

> Elements that make up an Financial Analyzer dimension. For example, the dimension values of the Product dimension might include Tents, Canoes, Racquets, and Sportswear.

**financial data item**

> An Financial Analyzer 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.

**foreign currency**

> Any currency other than your functional currency. If you enter a transaction in a foreign currency, General Ledger automatically converts transaction amounts to your functional currency using rates you supply.

**functional currency**

> The currency in which you record transactions. If you enter a transaction in some other currency, General Ledger automatically converts transaction amounts to your functional currency using rates you supply.

**integer data type**

> Any Financial Analyzer variables with an integer data type contain whole numbers with values between -2.14 billion and +2.14 billion.

**line item dimension**

> Dimensions that include the General Ledger natural account segment as part of their definition are identified as line item dimensions in Financial Analyzer.

**Many-to-Many attribute**

In Financial Analyzer, 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 you enter in General Ledger to represent structures in Financial Analyzer. Metadata consists of the dimensions, segment range sets, hierarchies, financial data items, and financial data sets you define in General Ledger. When you load financial data from General Ledger, Financial Analyzer creates dimensions, dimension values, hierarchies, and variables based on the metadata.

**model**

A set of interrelated equations for calculating data in Financial Analyzer.

**multidimensional data**

Data organized by two or more dimensions. With two dimensions, the data is structured as an array with rows and columns. With three dimensions, it is structured as a cube in which each dimension forms an edge. Structures with more than three dimensions have no physical metaphor, but they can organize data in ways that are useful for analysis.

Multidimensional databases are optimized for complex data analysis. For example, a Sales variable might be dimensioned by TIME, PRODUCT, and GEOGRAPHY, so that only a few short steps would be needed to find the 10 cities with the top sales of tents over the last 3 months. In a relational database, a complex SQL program would be needed to get the same information.

**natural account segment**

In General Ledger, the segment which determines whether an account is an asset, liability, owners' equity, revenue, or expense account. When you

define your chart of accounts, you must define one segment as the natural account segment. Each value for this segment is assigned one of the five account types.

**Note:** Accounting personnel often use the word "Account" to refer only to their organization's natural account segment. This may seem confusing, since the combined segment values in General Ledger is also referred to as an account. In this document, we use "account" to refer to the combined segment values, while the term "natural account segment" refers to the one segment which is defined as the natural account segment.

**One-to-Many attribute**

A relationship in Financial Analyzer 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.

**parent segment value**

A summary-level segment value which represents a group of child segment values.

You enter and post transactions in General Ledger against accounts which are comprised of child segment values. You store balances for these accounts when you post transactions. You do not enter or post transactions against accounts which have one or more parent segment values, and these accounts do not actually store balances. They summarize the balances of the accounts with the corresponding child segment values. You use parent segment values for summary reporting and on-line inquiries in General Ledger. Financial Analyzer uses parent and child segment values to create hierarchies.

**personal database**

Personal databases are used by Financial Analyzer 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 an Financial Analyzer database object belongs to a personal library, it means that the object was created by the workstation user and can be modified.

**root node**

        A parent segment value in General Ledger which is the top-most node of a hierarchy. When you define a hierarchy using the Hierarchy form (Standard path: Setup Analyzer Hierarchy), you specify a root node for each segment. Financial Analyzer creates a hierarchy by starting at the root node and drilling down through all of the parent and child segment values.

**segments**

        The building blocks of your chart of accounts in General Ledger. Each account is comprised of multiple segments. Users choose which segments will make up their accounts; commonly-used segments include company, cost center, and product.

**segment values**

        The possible values for each segment of the account. For example, the Cost Center segment could have the values 100, which might represent Finance, and 200, which might represent Marketing.

**selection tools**

        A set of tools in Financial Analyzer that provide shortcut methods for selecting the values that you want to work with in a report, graph, or worksheet.

**set of books**

        An entity or group of entities in General Ledger for which you want to record transactions and maintain account balances. All of the entities in a set of books must share a chart of accounts, functional currency, and accounting calendar.

**shared database**

> The Financial Analyzer 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, worksheets and graphs. Shared databases are maintained by Administrators.

**shortdecimal data type**

> Financial Analyzer variables with a shortdecimal data type contain decimal numbers with up to 7 significant digits.

**shortinteger data type**

> Financial Analyzer variables with a shortinteger data type contain whole numbers with values between -32767 and +32767.

**sparsity**

> A concept that refers to multidimensional data in which a relatively high percentage of the combinations of dimension values do not contain actual data. Such "empty," or NA, values take up storage space in the database. To handle sparse data efficiently, you can create a composite.
>
> There are two types of sparsity.
>
> - *Controlled sparsity* -- Occurs when a range of values of one or more dimensions has no data; for example, a new variable dimensioned by MONTH for which you do not have data for past months. The cells exist because you have past months in the MONTH dimension, but the cells contain NA values.
>
> - *Random sparsity* -- Occurs when NA values are scattered throughout the variable, usually because some combinations of dimension values never have any data. For example, a district might only sell certain products and never have data for other products. Other districts might sell some of those products and other ones, too.

**STAT**

> The statistical currency General Ledger uses for maintaining statistical balances. If you enter a statistical transaction using the STAT currency, General Ledger will not convert your transaction amounts.

**Time dimension**

> An Financial Analyzer 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**

> An Financial Analyzer database object that holds raw data. Data can be numerical, such as sales or expense data, or textual, such as descriptive labels for products.

**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.

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# Reader's Comment Form

**Integrating Oracle® Financial Analyzer Release 6.2**
**with Oracle General Ledger Release 11**
Release 1.0
Part No. A63464-01

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.

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