ORACLE® ESSBASE SPREADSHEET ADD-IN

RELEASE 11.1.2

USER'S GUIDE

ORACLE®

ENTERPRISE PERFORMANCE MANAGEMENT SYSTEM

Spreadsheet Add-in User's Guide, 11.1.2

Contents

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1 Essbase Overview

Oracle Essbase is a multidimensional database server optimized for planning, analysis, and management reporting applications. The Essbase Server provides an attractive solution for such problems while retaining:

- The spreadsheet software that has become so integral to day-to-day operations.

- The flexibility of defining applications, consolidations, currency conversions, allocations, and eliminations to reflect their impact on your enterprise.

- The security and accessibility of your data.

Essbase is designed to be used in many application areas. Financial analysts find facilities to be invaluable in budget analysis, currency conversion, and consolidation. Cost accountants apply the powerful capabilities of Essbase to evaluate allocation and elimination scenarios. Product managers and analysts use Essbase to plan and analyze multiple product lines and distribution channels. Essbase can be used as a repository database for spreadsheet data. Anyone who uses a spreadsheet is a potential user of Essbase.

Because Essbase is applicable to such a broad variety of environments, individuals using it may fill one or more of these roles:

- **Essbase System Administrator**—Experienced in networking, installing software packages, and performing general system administration functions. This person installs the Essbase software, establishes user accounts, implements access permissions, and maintains the server database.

- **Application Designer**—Sets up the Essbase database, creates the database outline, and develops calculation scripts and report scripts. The responsibilities of the Essbase System Administrator and the Application Designer may overlap in some areas. The Application Designer probably develops spreadsheet or database applications and understands operational problems and the tools being employed to solve them.

- **User**—Interacts with the Essbase database through spreadsheets using Excel. Users are typically analysts and managers who use spreadsheet programs as their primary tool for representing and analyzing data.

All roles may be performed by one person, or several people may collaborate to perform one role.

When you add Oracle Essbase Spreadsheet Add-in to Excel, most spreadsheet operations remain unchanged; Spreadsheet Add-in adds an Essbase menu and toolbar, and mouse shortcuts that enable you to access Essbase applications and databases.

<table>
<tr><td>**2**</td><td># Getting Started with Spreadsheet Add-in</td></tr>
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In This Chapter

Registering Spreadsheet Add-in

During installation, Spreadsheet Add-in is automatically registered with Excel and included in the Windows registry entries.

You may unregister Spreadsheet Add-in from Excel. Unregistering clears the registry entries and removes the Essbase menu from Excel; however, it leaves the Spreadsheet Add-in components on your computer.

To put the Spreadsheet Add-in back into Excel, you can run the register program manually.

➤ To manually register Spreadsheet Add-in, select **Start**, then **Programs**, then **Oracle EPM System**, then **Essbase**, then **Essbase Client**, and then **Register Spreadsheet Add-in**.

➤ To unregister Spreadsheet Add-in, select **Start**, then **Programs**, then **Oracle EPM System**, then **Essbase**, then **Essbase Client**, and then **Unregister Spreadsheet Add-in**.

Related Topics

"Connecting to Multiple Databases" on page 25

"Logging On to Essbase" on page 23

"Logging On to Essbase from Visual Explorer" on page 154

Loading Spreadsheet Add-in

If you manually update your environment settings or if you removed Spreadsheet Add-in from the Excel environment, you must use the Excel add-in tool to load Spreadsheet Add-in in Excel. Loading Spreadsheet Add-in adds the Essbase menu to the Excel menu bar and points Excel to the Spreadsheet Add-in file (`essexcln.xll`) in *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/bin`.

➤ To load Spreadsheet Add-in in Excel:

1 In Excel, select **Tools**, and then **Add-Ins**.

2 In **Add-ins**, click **Browse**.

The Browse dialog box is displayed.

3 **Locate** `essexcln.xll` **and select it.**

The file is in the *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/bin` directory where you installed Spreadsheet Add-in.

4 Click **OK** twice to close the dialog boxes.

Loading Spreadsheet Add-in in Excel modifies the Windows Registry to point to where the Spreadsheet Add-in file is installed.

5 Start Spreadsheet Add-in.

If Excel does not contain an Essbase menu, see the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Troubleshooting Guide*.

Activating the Essbase Toolbar

In Excel, Spreadsheet Add-in provides a toolbar with icons for accessing most of the common Essbase commands, without having to open the Essbase menu. You can view a description of a toolbar icon by moving the cursor over the icon.

Before you can use the Essbase toolbar, you must activate it.

➤ To activate the Essbase toolbar:

1 **Start Excel.**

2 Select **File**, and then **Open**.

3 **From** *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open** `esstoolb.xls`.

> **Note:** If you cannot locate the file, contact your Essbase system administrator.

A blank worksheet opens.

> **Note:** If Excel displays warning messages related to macros, select to Enable Macros. Macros must be enabled for the Essbase toolbar to work.

4 Select **File**, and then **Close**, to close `esstoolb.xls`.

Do *not* modify or save this file.

5 From the Excel menu bar, select **View**, then **Toolbars**, and then **Oracle Essbase**.

A check to the left of Oracle Essbase indicates that the toolbar is active.

See Table 1 for information on the commands available from the Essbase menu and toolbar.

Enabling Compatibility with Smart View

If Oracle Hyperion Smart View for Office, Fusion Edition and Spreadsheet Add-in are installed on one computer, complete this procedure to ensure that Spreadsheet Add-in functions properly.

➤ To enable compatibility between Spreadsheet Add-in and Smart View:

1 In Excel, select **Essbase**, and then **Options**.

2 In **Global**, under **Mouse Actions**, select **Limit to Connected Sheets**.

When Spreadsheet Add-in and Smart View are installed on one computer and this option is selected, mouse clicks are ignored by Spreadsheet Add-in if the sheet being acted upon is connected to a data source other than an Essbase application and database (for example, a Oracle Hyperion Planning, Fusion Edition data source).

3 Click **OK**.

Enabling Mouse Actions

Essbase offers enhanced mouse actions in Excel. You can use the mouse to perform these tasks:

- Retrieve data
- Drill down and drill up on database members
- Pivot (move or transpose) data rows and columns

> **Note:** To execute a pivot, you must press the secondary, rather than the primary, mouse button while dragging the selection.

- Access linked reporting objects
- Access linked partitions

➤ To enable double-clicking to retrieve, drill down, and drill up on Essbase data:

1 Select **Essbase**, and then **Options**.

2 On **Global**, select **Enable Double-Clicking**.

When Enable Double-Clicking is selected, you can retrieve and drill down to more detailed data (primary mouse button) and drill up to less detailed data (secondary mouse button). When double-clicking is enabled, the in-cell editing feature is overridden.

3 Click **OK**.

See "Enabling Double-Clicking to Browse LROs" on page 61.

Essbase Command Summary

Table 1 describes the commands available from the Essbase menu and toolbar.

Note: Closing Excel using the Close icon on the upper-right of the Excel window causes the Essbase menu to disappear and deactivates Spreadsheet Add-in. If you then cancel the close, you cannot access Spreadsheet Add-in. You must close and reopen Excel in order to reactivate Spreadsheet Add-in and the Essbase menu.

Table 1   Essbase Commands

Toolbar Icon	Command	Description
	Retrieve	Retrieves data into the active worksheet. Retrieve places the data at the beginning of the active worksheet.
		When you select Retrieve, the Essbase System Login dialog box is displayed if you are not connected to the server.
		Tip: If mouse actions are enabled, you can retrieve data by double-clicking the primary mouse button in an empty cell in the worksheet. To enable double-clicking mouse button support, select Essbase, and then Options. On the Global page, select the Enable Double-Clicking option.
	Keep Only	Retains only the selected member (the active cell) or member range in the worksheet.
		All unselected members are removed from the worksheet.
	Remove Only	Removes the selected member (the active cell) or member range in the worksheet. When you select Remove Only, all unselected members are retained in the worksheet.
	Zoom In	Retrieves and expands data from Essbase Server according to the options specified in the Essbase Options dialog box (Zoom page).
		If you mouse actions are enabled, you can zoom in on data by double-clicking the primary mouse button in the cell containing the member you want to expand. To enable double-clicking mouse button support, select Essbase, and then Options. On the Global page, select the Enable Double-Clicking option.
		You cannot zoom in on a Dynamic Time Series member.
		If the spreadsheet contains spaces between rows and you drill down on a member, Essbase mirrors the spaces in the resulting report.

Toolbar Icon	Command	Description
	Zoom Out	Collapses the view according to the options specified in the Essbase Options dialog box (Zoom page).
		If you mouse actions are enabled, you can zoom out by double-clicking the secondary mouse button in the cell containing the member you want to collapse. To enable double-clicking mouse button support, select Essbase, and then Options. On the Global page, and select the Enable Double-Clicking option.
		You cannot zoom in on a Dynamic Time Series member.
	Pivot	Enables you to change the orientation of the data:
		● Move a row group to a column group.
		● Move a column group to a row group.
		● Transpose the order of row groups.
		● Transpose the order of column groups.
		When you select the Pivot command, Essbase changes the orientation of the group of members associated with the active cell.
		You can press the secondary mouse button and drag the member you want to pivot to the destination cell, which enables you to switch the position of row or column members with one another.
		Tip: To enable secondary mouse button support, select Essbase, and then Options. On the Global page, select the Enable Secondary Button option.
	Navigate Without Data	Enables you to perform navigational operations such as Pivot, Zoom In, Zoom Out, Keep Only, and Remove Only without retrieving data. A check mark next to the command indicates that this feature is turned on. This command serves the same function as selecting Navigate Without Data in the Essbase Options dialog box.
	Sample Data (Zoom In)	Enables sampling in Spreadsheet Add-in. Sampling enables you to zoom in on a "sample" of the data, making for more rapid queries. When sampling is enabled, the approximate sampling percentage indicated in the Essbase Options Dialog Box - Zoom page is applied to Zoom In operations.
	Linked Objects	Enables you to create or access linked objects and displays the objects currently linked to the selected data cell.
		Opens the Linked Objects Browser dialog box.
		Note: You cannot create linked objects for member combinations containing attributes.
	Query Designer	Enables you to easily create queries and reports using a powerful interface. You can define the page orientation of dimensions and members, perform member filtering, data filtering, and data sorting. You can save queries for later use.
	Visualize & Explore	Enables you to access Oracle Essbase Visual Explorer, where you can select members from an Essbase database and display them in a graphical format.
		See the Visual Explorer online help that is accessed from the Help menu Visual Explorer.
	FlashBack	Restores the previous view.
	Options	Enables you to select options for the active worksheet and customize the behavior of Spreadsheet Add-in.
		Opens the Essbase Options dialog box.
		Note: You cannot save spreadsheet settings to a protected worksheet.

Toolbar Icon	Command	Description
	Member Selection	Enables you to select members from the multidimensional database outline. Opens the Essbase Member Selection dialog box. **Note:** Member selection supports selecting attributes so that you can display them in the spreadsheet report.
	Currency Report	Enables you to perform ad hoc currency conversions during data retrieval. Opens the Essbase Currency Report dialog box. If your organization implemented a Currency Conversion application, you can use the Currency Report command to perform currency retrievals and conversions dynamically.
	Cascade	Enables you to replicate worksheets using member combinations. Opens the Essbase Cascade Options dialog box. **Note:** You can create cascade reports based on attribute members.
	Retrieve & Lock	Locks the data blocks specified in the retrieval. Other users cannot update these blocks. **Note:** Spreadsheets containing Dynamic Time Series members are not supported with the Retrieve & Lock command.
	Lock	Locks all data blocks in the current view (that is, all data blocks that appear in the current worksheet). You can lock only one view. The lock and send processes use committed access modes. If the data cache is too small to hold the number of blocks specified in the commit settings, blocks are written to disk before the transaction is committed as soon as the caches become full. This allows other blocks to come in and be worked on. Each lock (one lock per block) uses approximately 80 bytes of memory to track through a calculation, and these locks are held in memory until the transaction is completed. This memory usage can present problems for models with large number of blocks as the addressable memory space per process is limited and large models may eventually hit this limit.
	Unlock	Unlocks blocks that you locked.
	Send	Updates the active database on the server with data in the worksheet. The lock and send processes use committed access modes. If the data cache is too small to hold the number of blocks specified in the commit settings, blocks are written to disk before the transaction is committed as soon as the caches become full. This allows other blocks to come in and be worked on. Each lock (one lock per block) uses approximately 80 bytes of memory to track through a calculation, and these locks are held in memory until the transaction is completed. This memory usage can present problems for models with large number of blocks as the addressable memory space per process is limited and large models may eventually hit this limit.
	Calculation	Enables you to calculate the active database or check on the status of an active database calculation. Opens the Essbase Calculation dialog box.
	Connect	Enables you to connect to an instance of Essbase Server. Opens the Essbase System Login dialog box.
	Disconnect	Enables you to disconnect from the currently connected database. Opens the Essbase Disconnect dialog box, which displays all databases to which you are currently connected.

Logging On to Essbase

To use Spreadsheet Add-in with Essbase, you must first log on to an Essbase Server.

Note: Essbase does not support multiple instances of Excel.

➤ To log on to the server:

1 In Excel, select **Essbase**, and then **Connect**, to open **Essbase System Login**.

2 In **Server**, select the server to access or enter a server name.

3 Enter your **user name**.

4 Enter your **password**.

5 Click **OK**.

When the server connection is complete, a list of available application and database pairs displays in the Application/Database list.

One instance of Essbase Server enables simultaneous access to multiple applications. An application can contain multiple databases. Only databases that you are permitted to access are listed.

6 In **Application/Database**, select an application and database pair, and then click **OK**.

If the application is not running, Essbase automatically starts it. Essbase may pause briefly while loading the application; the time required to start an application depends on the size and number of databases contained within the application and the size of their indexes.

Related Topics

Logging Off Essbase

After you finish using Essbase, you must disconnect from the database. Exiting the spreadsheet logs you off Essbase.

➤ To disconnect from the database:

1 Select **Essbase**, and then **Disconnect**.

2 In **Essbase Disconnect**, select the worksheet and database to disconnect from.

3 Click **Disconnect**.

4 Click **Close**.

Essbase provides two administrative features that control user connections:

● *Forced Logout*, where an administrator disconnects users. These usually occurs when maintenance operations are performed on databases.

● *Auto Logout*, where Essbase automatically disconnects users that are inactive for a timed interval specified by an administrator.

Related Topics

Changing Passwords

You must change your password whenever it expires or for security purposes.

➤ To change your password:

1 Select **Essbase**, and then **Connect**.

If you are not currently connected to a database, you must connect to one. You can change your password only if you are connected to a server.

2 Click **Change Password**.

3 In **Change Password**, enter a password in **New Password**.

4 Enter the password again in **Confirm Password**.

5 Click **OK**.

> **Note:** If Essbase forces you to change your password (for example, if your password expires) the Change Password dialog box displays automatically.

Related Topics

Working with Databases

Connecting to Multiple Databases

Essbase supports simultaneous access to multiple databases. The databases can be in different applications and can be stored on different servers. You can also open multiple worksheets, each of which can be connected to another database.

While an individual worksheet can access only one database, you can switch the connection by using the Connect command.

Tip: If you rename a worksheet, verify the database connection by selecting Essbase, and then Disconnect, and viewing the connection information in the Essbase Disconnect dialog box. If the connection information is not what you expect for the renamed worksheet, disconnect the worksheet from the application and reconnect using the Connect command.

Depending on the status of production applications at your site, you may not have access to additional applications or databases. Contact the Essbase System Administrator to access other applications.

➤ To connect to multiple databases:

1 Select **Essbase**, and then **Connect**. .

Essbase System Login is displayed.

2 In **Server**, select a server to access or enter a server name.

3 Enter your **user name**.

4 Enter your **password**.

5 Click **OK**.

When the server connection is complete, a list of available application and database pairs is displayed in the Application/Database list.

6 Select an application and database pair, and then click **OK**.

If the application is not running, Essbase automatically starts it. Essbase pause briefly as the application loads; the time required to start an application depends on the size and number of databases contained within the application and the size of their indexes.

7 Open a worksheet and repeat these steps to connect to additional databases.

You can access one database per worksheet.

Related Topics

Viewing Active Database Connections

You can view all databases/applications to which you are currently connected.

➤ To list current database connections:

1 Select **Essbase**, and then **Disconnect**.

   The Essbase Disconnect dialog box lists all active worksheets and their connection information. Use this dialog box to disconnect worksheets from their respective databases.

2 Click **Close**.

Note: The Style page of the Essbase Options dialog box lists the connection information for the active worksheet.

Related Topics

Navigating Through Spreadsheets

Navigating through the spreadsheet involves drill-down or drill-up operations. *Drilling down* is the process of retrieving more detailed data within a dimension. You can drill down into more detailed data until you reach the lowest level of a dimension as defined in the database outline (see "Drilling Down to More Detail" on page 54). For example, for the Year dimension in the Sample Basic database, you can drill down to the quarter level, and drill down further to the month level. Drilling up is the opposite of drilling down, where you move up the hierarchy within a dimension to less detailed data (see "Drilling Up to Less Detail" on page 53.

The Essbase Options dialog box enables you to customize the behavior of the Zoom In and Zoom Out menu commands. You can use the zoom options in the Essbase Options dialog box to

control the depth (or level) of the drill down, the grouping) of retrieved members, and the removal of unselected member groups.

Displaying Messages

- "Specifying Message Type to Display" on page 27
- "Displaying Unknown Members" on page 27

Specifying Message Type to Display

You can display three types of messages in Essbase; information, warnings, and errors.

➤ To specify the message types to display:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Global**.

3 Under **Display Messages**, select an option:

- **Information** displays all informational messages from Essbase, including warnings and errors.
- **Warnings** displays warning and error level messages from Essbase.
- **Errors** displays error messages from Essbase.
- **None** suppresses all messages.

4 Click **OK**.

Related Topics

"Displaying Unknown Members" on page 27

Displaying Unknown Members

Your spreadsheet may contain members that do not match database members. Essbase can display a message box indicating that unknown members are present in the spreadsheet.

➤ To display members that do not match members in the database:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Global**.

3 Select **Display Unknown Members**.

4 Click **OK**.

> **Note:**   If you do not want the message box to display, clear the check box.

Related Topics

3

Retrieving and Updating Data

Retrieving Multidimensional Data

A multidimensional database supports multiple views of data sets for users who must analyze the relationships between data categories. These data categories are called dimensions. A dimension can contain an unlimited number of members.

For example, the Product dimension may contain various product names as its members. The intersection of one member from each of the dimensions represents a data value in the database.

To use Essbase to work with data, you must connect fromSpreadsheet Add-in to a server and a database containing data (see "Logging On to Essbase" on page 23). See the Essbase System Administrator for connection and access information.

The Retrieve command extracts data from the server and displays the data in Spreadsheet Add-in. Each time you retrieve information from a server, Essbase performs four distinct operations:

● Spreadsheet Add-in requests data from the server.

- The server processes the request and prepares the data.

- The server transmits the data to Spreadsheet Add-in.

- Spreadsheet Add-in receives the data from Essbase and organizes it in the worksheet.

To help you monitor these operations, Essbase uses three custom cursors in Spreadsheet Add-in:

- —Essbase is requesting information from the server.

- —The server is processing the request.

- —The server is returning data.

Note: Less complex operations display the cursors very quickly; you may not notice changes in the direction of the arrow when retrieving small amounts of data.

See the *Oracle Essbase Database Administrator's Guide*.

Reading Multidimensional Data in Two-Dimensional Spreadsheets

If you are an analyst in your company and want to know the difference between the actual and budgeted sales of beverages in all markets of each quarter in a certain year, you can easily determine this data using Essbase. In a multidimensional database, a data value is the intersection of all dimensions in the database. In a spreadsheet, a cell is the intersection of a row and column.

To translate the spreadsheet cell into a multidimensional data value, think of the multidimensional data as the intersection of one member from each of these dimensions displayed as rows and columns of a spreadsheet:

	A	B	C	D	E	F	G	H	I
1						Sales			
2			Qtr1		Qtr2		Qtr3		
3			Actual	Budget	Actual	Budget	Actual	Budget	Actual
4	East	Colas	6292	5870	6292	6760	7230	7300	7770
5		Root Beer	5726	5460	5726	5650	5902	5600	5863
6		Cream Soda	4868	3680	4868	4030	5327	3850	5142
7		Fruit Soda	3735	3880	3735	4150	3990	4350	4201
8	West	Colas	6950	8500	6950	8800	7178	9100	7423
9		Root Beer	8278	7700	8278	7970	8524	8320	8885
10		Cream Soda	8043	6890	8043	7720	8982	8300	9616
11		Fruit Soda	8403	5540	8403	5840	8888	6070	9206
12	South	Colas	3732	4570	3732	5000	4078	5470	4457

Each region of the Market dimension is displayed as a row in the spreadsheet. Spreadsheet Add-in displays each beverage product of the Product dimension as rows of the spreadsheet next to the rows containing the Market dimension.

The Time dimension, represented by each quarter, is displayed as columns of the spreadsheet. The Actual and Budget members of the Scenario dimension are also displayed in the columns of the spreadsheet. The cells of the intersection of the rows and columns in this spreadsheet represent the data values.

For example, the first data value in cell C4, 6292, represents the actual sales of colas for the East region in Qtr1. All values in the spreadsheet are sales values.

You can also rearrange the layout of the dimensions in the spreadsheet using pivot operations to interchange row dimensions as column dimensions and vice versa.

Retrieving Data Into Blank Worksheets

When you retrieve data into a blank worksheet, Essbase returns data from the top levels of each dimension. You can use this as a starting point to navigate into more detailed levels of data.

➤ To retrieve data into a blank worksheet:

1 **Select an empty cell.**

2 **Select Essbase, and then Retrieve.**

Note: Spreadsheet Add-in does not support worksheet sizes greater than 65,536 rows by 256 columns.

Related Topics

"Canceling Data Retrieval Requests" on page 47

"Preserving Formulas when Retrieving Data" on page 34

"Retrieving Data Ranges" on page 41

"Retrieving Data Using Functions" on page 49

"Retrieving Dynamic Calc Members" on page 43

"Retrieving in Free-Form Mode" on page 38

"Retrieving in Template Retrieve Mode" on page 40

"Retrieving Into Formatted Worksheets" on page 32

"Retrieving Substitution Variables" on page 45

"Specifying Latest Time Period for Dynamic Time Series" on page 46

"Updating Data on Essbase Server" on page 48

"Using Advanced Interpretation to Retrieve Generation and Level Names" on page 42

Retrieving Into Formatted Worksheets

Retrieving Data into Formatted Worksheets

Formatted worksheets can contain these formats:

● Spaces between rows and columns

● Cell values that contain text or data that is not defined in the database outline

● Member names in noncontiguous locations at the top of a worksheet

● Spreadsheet formulas (see also "Lesson: Preserving Formulas When Retrieving Data" on page 318)

● Visual cues (styles)

To retain the formatting when retrieving data into a formatted worksheet, you must specify certain options.

➤ To retrieve data into a formatted worksheet:

1   Select **Essbase**, and then **Options**.

2   In **Essbase Options**, select **Mode**.

3   In **Formula Preservation**, select **Retain on Retrieval**, to enable Formula Preservation mode.

   Note: Selecting Retain on Retrieval may cause slight delays in retrieval time.

   By default, an Essbase retrieval overwrites the spreadsheet formula with data values in the retrieval area of a worksheet. The retrieval process also eliminates formulas in cells outside the retrieval area. The Retain on Retrieval option, however, enables you to define retrievals that do not overwrite formulas in the worksheet.

4   Select **Display**.

5   To set column widths to fit the data, in **Cells**, select **Adjust Columns**.

6   To save these settings, click **OK**.

7   To update the worksheet with the latest data values, select **Essbase**, and then **Retrieve**.

   Essbase determines whether all text cells in the worksheet correspond to database member names. When Essbase is unable to resolve text values in the worksheet, a message box is displayed.

8   Click **Yes** to display the next unknown member or **No** to continue with the retrieval.

Tip: You can disable the unknown members message by clearing Display Unknown Members from the Global page in the Essbase Options dialog box.

Related Topics

Rules for Retrieving into Formatted Worksheets

Observe these rules when retrieving data into a formatted worksheet:

- **Rule 1**—The worksheet cannot contain numeric cells before the first Essbase data cell. These cells cannot contain formulas that resolve to numeric values.

  For example, if the first Essbase data cell is B6, no cell in rows 1 through 5 nor in cell A6 can contain numeric values, nor can these cells contain formulas that resolve to numeric values.

- **Rule 2**—A cell that lies within a row or column of Essbase data cannot contain text or numeric values. These cells can contain formulas, however, if the Formula Preservation options in the Essbase Options dialog box are selected.

  Note: If you must preserve text or numeric values in a cell, define that text or value as a spreadsheet formula and use the Formula Preservation options on the Mode page of the Essbase Options dialog box.

- **Rule 3**—Pivot is not available when the Formula Preservation options in the Essbase Options dialog box are selected.

- **Rule 4**—Use of the Pivot command removes all cells that contain text information other than database member names.

Retrieving Data from Relational Sources

Because relational databases can store several terabytes of data, they offer nearly unlimited scalability. Essbase multidimensional databases are generally smaller than relational databases but offer sophisticated analytical capabilities. With Hybrid Analysis, you can integrate a relational database with an Essbase database and leverage the scalability of the relational database with the conceptual power of the multidimensional database.

Hybrid Analysis eliminates the need to load and store lower-level members and their data within the Essbase database. This feature gives Essbase the ability to operate with almost no limitation on outlines sizes and provides for rapid transfer of data between Essbase databases and relational databases.

➤ To retrieve data that is stored in the Hybrid Analysis relational source:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Zoom**.

3 Select **Enable Hybrid Analysis**.

This option enables you to retrieve data from the Hybrid Analysis relational source.

> **Note:** If the outline contains multiple levels of Hybrid Analysis members, a zoom out operation on the bottom level Hybrid Analysis member takes you to the Essbase parent member, thus bypassing all other Hybrid Analysis levels.

4 Click **OK**.

5 Select **Essbase**, and then **Retrieve**, to retrieve the data.

Preserving Formulas when Retrieving Data

When you retrieve data into a worksheet with formulas, you must select the option to preserve the formulas in the cells or Essbase may overwrite them when retrieving data.

Collectively, the Formula Preservation options enable you to retain formulas during data retrievals, keep and remove only operations, and drill operations. In addition, Essbase can replicate formulas for additional members retrieved into the worksheet as part of a drilling operation.

Keep in mind these guidelines and restrictions when using the Formula Preservation options:

● On the Mode page of the Essbase Options dialog box, you must select the Advanced Interpretation option to enable Retain on Retrieval. The Formula Preservation options do not work with free-form retrieval mode.

● You must enable Retain on Retrieval to enable Retain on Keep and Remove Only and Retain on Zooms.

● You must enable Retain on Zooms to enable Formula Fill.

- When you select the Retain on Retrieval option, the Suppress #Missing Rows and Zero Rows options on the Display page are not available. If you selected a Display option, the Formula Preservation options become unavailable automatically.

- When you select the Retain on Zooms option, the Remove Unselected Groups option on the Zoom page is not available. When you enable the Remove Unrelated Groups option, Retain on Zooms becomes unavailable automatically.

- When Retain on Retrieval is selected, retrieval time may be slightly delayed.

- As a general rule, insert a blank row as the last row in the formula range. This action ensures that the cell range in the formula expands properly when you drill down on members when Retain on Zooms is selected.

  For example, cell B6 is in a blank row. Therefore, the formula for cell B7 should be =SUM(B2:B6) to ensure that it contains the blank row:

B7			=SUM(B2:B6)		
	A	**B**	**C**	**D**	**E**
1		Measures	Product	Market	Scenario
2	Qtr1	24703			
3	Qtr2	27107			
4	Qtr3	27912			
5	Qtr4	25800			
6					
7		105522			
8					

  When you drill down on Qtr4, the formula for cell B9, =SUM(B2:B8), properly expands to include the range of Oct, Nov, and Dec:

B9			=SUM(B2:B8)		
	A	**B**	**C**	**D**	**E**
1		Measures	Product	Market	Scenario
2	Qtr1	24703			
3	Qtr2	27107			
4	Qtr3	27912			
5	Oct	8653			
6	Nov	8367			
7	Dec	8780			
8					
9		105522			

- Formula arrays are not supported in Spreadsheet Add-in when the preserve formula option is on. If formula arrays are in the worksheet, Essbase does not preserve these types of formulas.

➤ To preserve formulas when retrieving data:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Mode** and select **Advanced Interpretation**.

3 In **Formula Preservation**, select **Retain on Retrieval**, to enable Formula Preservation mode.

4 To save this setting, click **OK**.

5 To update the worksheet with the latest data values, select **Essbase**, and then **Retrieve**.

Related Topics

Free-Form Reporting

Free-form reporting enables you to tell Essbase what you want to retrieve by typing members into the spreadsheet. Free-form reporting is especially useful when you are familiar with the members and dimensions in the database outline.

Essbase provides two retrieval modes for free-form reporting as described in these sections:

-
-

Advanced Interpretation Mode Retrievals

Essbase provides an advanced spreadsheet interpretation engine that scans a spreadsheet and interprets its content when fulfilling retrieval requests. This feature enables you to define spreadsheet layout through drill operations, Retrieval Wizard operations, or by typing members into the spreadsheet.

When you construct a report by typing member names directly in the spreadsheet in Advanced Interpretation mode, Essbase interprets the member names and creates a default view based on the location of the labels.

You can enter the name of a database member into a spreadsheet and use the Essbase Retrieve command to retrieve its data. You can enter a member name to add information to a spreadsheet, or enter member names in a spreadsheet to construct a custom report.

Free-Form Mode Retrievals

As in Advanced Interpretation mode, with Free-Form mode you can enter dimension members in the spreadsheet and retrieve a report. In Free-Form mode, you can also enter Essbase Report Script Editor commands to retrieve data into a spreadsheet.

Report Script Editor commands are most useful for defining member references that can dynamically bring back the most current member information. For example, if you must create a report that shows every product, including those added since the last retrieval, standard retrieval mode only reflects these changes when you drill down on the product.

The Report Script Editor command `<IDESCENDANTS` retrieves all descendants of a member in the database, including the specified member. See the *Oracle Essbase Technical Reference* and the *Oracle Essbase Database Administrator's Guide*.

	A	B	C
1	Sales	East	Budget
2			
3		Qtr1	Qtr2
4	Colas		
5	Root Beer		
6	Cream Soda		
7	Fruit Soda		

Differentiating Between Symmetric and Asymmetric Reports

Essbase reports can contain symmetric or asymmetric column and row groups. Essbase determines the symmetry of column and row groups automatically, based on the members you select:

- Symmetric reports—Characterized by repeating, identical groups of members

	A	B	C	D	E	F
1						
2			East		West	
3			Qtr1	Qtr2	Qtr1	Qtr2
4	Measures	Scenario	5380	6499	7137	7515
5						
6						

- Asymmetric reports—Characterized by groups of nested, or subordinate, members that differ by at least one member in the nested group; the number of members or the names of members can differ

	A	B	C	D	E	F	G
1	Sales						
2							
3			*Actual*	*Budget*	*Budget*	*Budget*	
4			**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	
5	East	Colas	6292	6760	7300	5570	
6		Root Beer	5726	5650	5600	5780	
7		Fruit Soda	3735	4150	4350	3850	
8							
9	West	Root Beer	8278	7970	8320	7820	
10		Cream Soda	8043	7720	8300	7570	
11							

Note: If you retrieve into asymmetric reports, Essbase must perform additional operations to maintain the asymmetric layout, which may increase the retrieval time on large reports. See the *Oracle Essbase Database Administrator's Guide*.

Retrieving in Free-Form Mode

Free-Form mode provides additional retrieval capabilities. First, it enables you to enter member names into a random location in the worksheet. In this mode, Essbase scans the names in a worksheet and picks a default view for you. In addition, Free-Form mode enables you to use Essbase report script commands to retrieve data into a worksheet. The report script commands are most useful for defining member range references that can dynamically bring back the most current member information.

In Free-Form mode, Essbase retrieves data with these characteristics:

- Essbase interprets the member names and creates a default view based on the location of the labels.

- Essbase removes blank rows and columns on a retrieval action.

When creating a free-form report in Free-Form mode , keep these guidelines in mind:

- You must precede all member names that consist of numbers with a single quotation mark. For example, if the product code for Cola is 100, you must enter `'100` in the worksheet.

- You cannot cancel retrievals based on Free-Form mode.

- Styles are not available in Free-Form mode.

- If you are connected to an application and database that supports duplicate member names, you cannot perform Free-Form retrievals.

- To use Dynamic Time Series in Free-Form or Template Retrieve mode, do not put the Dynamic Time Series and the latest member (for example, Q-T-D (Feb)) in one cell. You must enter the Dynamic Time Series member, Q-T-D, and the latest member within parentheses, (Feb), in adjacent cells.). In Free-Form mode, you must enclose the Dynamic Time series and the latest member in quotation marks (for example, "Q-T-D" ("Feb")).

- Do not use Report Writer formatting commands, such as {BRACKETS}, {DECIMAL}, and {EUROPEAN} in Free-Form mode, because they are incompatible with the Excel formatting features.

- Spreadsheet Add-in does not recognize changes to member aliases in the outline that are made while the Spreadsheet Add-in connection is active. Depending on the details of the changes made and the structure of the spreadsheet, affected data cells may show missing or incorrect data upon retrieval after the change, but no warning or error messages are generated.

- Essbase removes blank rows and columns on retrieval actions.

- In Free-Form mode, Essbase enables Auto Sort Rows on the Display page of the Essbase Options dialog box. When you select this feature, Essbase retrieves data in symmetric rows that are sorted based on the order specified in the database outline.

- In Free-Form mode, Essbase disables the options under the Modes and Formula Preservation groups on the Mode page of the Essbase Options dialog box.

➤ To retrieve data in Free-Form mode:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Mode**.

3 Under **Retrieval**, select **Free Form**.

4 To retrieve data into symmetric rows that are sorted according to the database outline, in **Display**, select **Auto Sort Rows**.

   This option is available only when Free-Form retrieval mode (but not Template Retrieve) is selected.

5 In the spreadsheet, enter the members names of the report you want to create, or enter the report script command you want to retrieve.

   For example, the report script command `<IDESCENDANTS Product` tells Essbase to retrieve all descendants of the Product dimension.

6 Select **Essbase**, and then **Retrieve**.

Related Topics

Retrieving in Template Retrieve Mode

Template Retrieve mode enables you to define reports using the Essbase Report Script Editor command language. Report Script Editor commands let you select data items and place them in a row or column of the worksheet. See the *Oracle Essbase Database Administrator's Guide*.

The major difference between Template Retrieve mode and the standard retrieval mode is that Template Retrieve mode enables you to dynamically query branches of member in dimension trees. For example, if you must create a report that shows every product, including those added since the last retrieval, standard retrieval mode only reflects these changes when you drill down on the product. The Report Script Editor command <IDESCENDANTS retrieves all descendants of a member in the database, including the specified member.

Notes:

- In Template Retrieve mode, Zoom In, Zoom Out, Keep Only, Remove Only, and Pivot commands are unavailable.

- If you are connected to an application and database that supports duplicate member names, you cannot perform retrievals in Template Retrieve mode.

- To use Dynamic Time Series in Free-Form or Template Retrieve mode, do not put the Dynamic Time Series and the latest member (for example, Q-T-D(Feb) in one cell. You must enter the Dynamic Time Series member, Q-T-D, and the latest member within parentheses, (Feb), in adjacent cells). In Free-Form mode, you must enclose the Dynamic Time series and the latest member in quotation marks (for example, "Q-T-D" ("Feb")).

- Do not use Report Writer formatting commands, such as {BRACKETS}, {DECIMAL}, and {EUROPEAN} in Free-Form mode, because they are incompatible with the Excel formatting features.

- Unlike Oracle's Hyperion® Web Analysis, Spreadsheet Add-in does not recognize changes to member aliases in the outline that are made while the add-in connection is active. Depending on the details of the changes made and the structure of the spreadsheet, affected data cells may show missing or incorrect data upon retrieval after the change, and error messages are generated.

➤ To retrieve data in Template Retrieve mode:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Mode**.

3 Under **Retrieval**, select **Free Form**.

4 Select **Template Retrieve**.

5 In the spreadsheet, enter the report script command you want to retrieve.

For example, the report script command `<IDESCENDANTS Product` tells Essbase to retrieve all descendants of the Product dimension.

6 Select **Essbase**, and then **Retrieve**.

Related Topics

Retrieving Data Ranges

You can select to retrieve a range of cells .

Selection retrievals are useful when:

- A worksheet contains multiple reports.
- A worksheet contains extraneous information that is not supported in a formatted report retrieval.
- You must retrieve only a small subset of values from the database, which dramatically decreases retrieval time for large data sets.
- You must retrieve data to an area of the worksheet other than the first column.

➤ To retrieve a selected range of data:

1 Drag the mouse across the range of cells in the worksheet.

2 Select **Essbase**, and then **Retrieve**.

When you retrieve data, Essbase restricts the retrieval to the selected range in the worksheet.

Note: Essbase uses only the selected range as input, so ensure that the range provides a query. See the *Oracle Essbase Spreadsheet Add-in User's Guide* for an example of retrieving a range of data.

Related Topics

Using Advanced Interpretation to Retrieve Generation and Level Names

Using Advanced Interpretation mode (see "Free-Form Reporting" on page 36), you can enter the generation name or level name of a dimension in the spreadsheet and retrieve the members belonging to the generation or level name for the report.

When creating a free-form report in Advanced Interpretation mode, keep these guidelines in mind:

- You must precede all member names that consist of numbers with a single quotation mark. For example, if the product code for Cola is 100, you must enter `'100` in the spreadsheet.

- If you define a report that is missing database dimensions, enter a dummy value, such as 0 (zero), in the first data location. Essbase overwrites this value with the contents of the corresponding database cell upon retrieval. If a member is not specified for the dimension, Essbase retrieves the highest level member in the dimension. The dummy value must be a numeric value.

- If you are connected to an application and database that supports duplicate member names, you cannot perform Free-Form retrievals.

➤ To retrieve generation name or level names in the spreadsheet:

1 Select **Essbase**, and then **Options**.

2 Select **Mode** and select **Advanced Interpretation**.

3 Click **OK**.

4 In a spreadsheet cell, enter the generation name or level name.

For example, Lev0,Year or Region.

You can determine the name of the generation name or level name using the By Generation Name or By Level Name options in the Essbase Member Selection dialog box or by asking the Essbase System Administrator.

5 Select **Essbase**, and then **Retrieve**.

Essbase displays the members belonging to the generation name or level name in the spreadsheet.

	A	B	C	D	E	F
1		Measures	Product	Region	Scenario	
2	Lev0,Year	105522				
3						
4						
5						

Related Topics

Retrieving Dynamic Calc Members

Dynamic Calc are database members that are excluded from the batch calculation process, thus shortening the regular database calculation time.

The Essbase application designer tags Dynamic Calc members in the database outline so that Essbase knows not to calculate those members until a data retrieval requests them. Dynamically calculating database members benefits Essbase Server in these ways:

- Reduced disk usage

- Reduced database restructuring time

- Reduced time to back up the database

Database values thatEssbase calculates dynamically take slightly longer to retrieve in Spreadsheet Add-in because calculations must be performed *before* retrieving data into the worksheet.

➤ To retrieve Dynamic Calc members and dynamically calculate the database, select **Essbase**, and then **Retrieve**.

Notes:

- To identify members tagged as Dynamic Calc members in the spreadsheet, you can define a visual cue, or *style* (see "Changing Member Name Fonts and Colors" on page 69), for them.

  Note: Other styles that you set may override a style for Dynamic Calc members. For example, if a parent member is a Dynamic Calc member, and if you set styles for parent and dynamic calculations, the style for the parent member overrides the style for the Dynamic Calc member. You must remove the style for parent members to see the style for Dynamic Calc members.

- Activate Navigate Without Data (see "Navigating Through Worksheets Without Retrieving Data" on page 59) while you are formatting a worksheet containing Dynamic Calc members so that Essbase does not dynamically calculate the database while you are creating the spreadsheet report.

- Dynamic Calc members may return incorrect values when a member formula references another Dynamic Calc member.

  For example, a member formula of a Dynamic Calc member A contains a function, @CONCATENATE. The result of that function is another Dynamic Calc member B. When the query only contains member A, the result may be incorrect because member B is not a direct reference in the formula of member A. The name string for member B itself is dynamically constructed.

  In this case, you should include Dynamic Calc members A and B in one query.

Related Topics

Retrieving Substitution Variables

The Essbase application designer uses substitution variables to define global variables to represent Essbase values. For example, Latest can be a substitution variable representing the latest time period in a Dynamic Time Series.

Using Administration Services Console, the application designer sets substitution variables and their corresponding values for an application. Essbase stores these variables and their values on the Essbase Server. You can leverage the predefined substitution variables in Spreadsheet Add-in during Dynamic Time Series reporting.

For example, say the application designer sets a substitution variable on the server for the current month. The variable is called CurMnth and its value is August. If you use the substitution variable in the worksheet, a retrieval returns values for August, because August is set as the current month on the server. If, at a later date, the application designer changes the value of the CurMnth substitution variable to October, a retrieval returns data for October.

➤ To retrieve substitution variables in the spreadsheet:

1 **Enter the substitution variable in the cell of a spreadsheet where you want the member to appear in the report.**

   You must precede the substitution variable with the "&" sign. For example, `&CurMonth`.

2 **Select Essbase, and then Retrieve.**

   Essbase replaces the substitution variable with the value that the Application Designer defined for it after Essbase retrieves the data.

   Note: If you save a spreadsheet containing a substitution variable as a template, ensure that you save the worksheet before you retrieve data.

Related Topics

Specifying Latest Time Period for Dynamic Time Series

Dynamic Time Series members are predefined members used in to-date reporting. Dynamic Time Series members do not appear as members in the database outline; instead, they correspond to a generation in a Time dimension. For example, in the Sample Basic database, you can create a generation name called Quarter for generation 2 in the Year dimension containing the members Qtr1, Qtr2, Qtr3, and Qtr4. When you create the generation name Quarter, Essbase creates and enables a Dynamic Time Series member called Q-T-D.

To use Dynamic Time Series in reports, you first define the latest period for which you want data. The latest period is a level 0 member in a Time dimension. In the Sample Basic database, the level 0 members are the months of the year: Jan, Feb, Mar, and so on. If the current month is August, and you want to know the sales data for the quarter up to the current month, Dynamic Time Series calculation gives you the sales data for the months of July and August.

Table 2 lists Dynamic Time Series by generation name.

Table 2   Dynamic Time Series

Dynamic Time Series	Generation Name
H-T-D	History
Y-T-D	Year
S-T-D	Season
P-T-D	Period
Q-T-D	Quarter
M-T-D	Month
W-T-D	Week
D-T-D	Day

Notes:

- The availability of the Dynamic Time Series member depends on what generation names you defined in the outline.

- The Application Designer can create alias names for the predefined time series members.

➤ To specify the latest time period to use in spreadsheet retrievals:

1 **Create a spreadsheet report using a predefined Dynamic Time Series member.**

   Note: In Advanced Interpretation mode, you can create a report by typing the name of the Dynamic Time Series member followed by the name of the latest time period in parentheses (for example `Q-T-D(May)`). If you are using Free-Form retrieval mode, you must enter the Dynamic Time Series member enclosed in quotation marks (for example, `"Q-T-D"`) and the latest time period also enclosed in quotes (for example, `("May")`) in adjacent cells. You can also select a Dynamic Time Series member and a latest time period through Query Designer or through Member Selection.

2 **Select Essbase, and then Options.**

3 **In Essbase Options, select Display.**

4 **Under Dynamic Time Series, select Latest Time Period and select one of the level 0 members of the Time dimension listed.**

   Note: If the spreadsheet contains a Dynamic Time Series member, Essbase places the latest time period in parentheses next to the Dynamic Time Series member. For example, if you selected May as the latest time period, the spreadsheet displays Q-T-D(May).

5 **Click OK.**

6 **Select Essbase, and then Retrieve.**

   Note: Spreadsheets containing Dynamic Time Series members are not supported with the Retrieve & Lock, Zoom In, and Zoom Out commands.

Related Topics

"Retrieving Substitution Variables" on page 45

Canceling Data Retrieval Requests

You can cancel retrieval requests that take longer than expected or if you mistakenly double-click.

Because Essbase returns data so quickly to the spreadsheet, you may not be able to cancel a retrieval before the retrieval is complete. This feature is most useful when you must stop a large retrieval request.

You can cancel a retrieve only while Essbase is processing in Spreadsheet Add-in. You cannot cancel a retrieval when Essbase is processing from the server.

➤ To cancel data retrievals, press **Esc** during a retrieval action.

Related Topics

"Preserving Formulas when Retrieving Data" on page 34

Updating Data on Essbase Server

After you retrieve data into a spreadsheet and modify values, you need to upload your changes to Essbase Server

Before you update data from a spreadsheet to Essbase Server, you must lock the database area that contains the values that are changing, because Essbase allows user concurrent database access and updates. Locking prohibits other users from changing or updating the data. Other users can retrieve locked data but cannot lock or change the data. Only you can access the locked area.

Note: You cannot update attribute-related data on the server because attribute data is calculated dynamically and, hence, is not saved.

Essbase provides a spreadsheet update logging facility that tracks and logs all data updates sent from Spreadsheet Add-in to Essbase Server. The Essbase System Administrator enables this facility for extra protection against data loss.

➤ To update data on Essbase Server:

1 **Select one method to lock the area of the database containing the data you want to change:**

- To retrieve data into the worksheet while simultaneously locking the corresponding data area on the server, select **Essbase**, and then **Retrieve & Lock**. When you perform a subsequent retrieval, Essbase automatically unlocks the previous data values.

- To lock information that you previously retrieved, select **Essbase**, and then **Lock**. When you perform a subsequent retrieval, Essbase automatically unlocks the previous data values.

- To automatically lock the corresponding database area with each retrieval, select **Essbase**, and then **Options**. In **Mode**, select **Update Mode**.

> **Note:** Update mode applies only to block storage databases.

2 **To upload data values from the spreadsheet to Essbase Server, select Essbase, and then Send.**

If data blocks are locked, Send automatically unlocks data after updating Essbase Server, unless you are in Update mode (block storage databases only). You must clear Update mode to stop locking blocks automatically.

3 **To unlock all blocks that you locked, select Essbase, and then Unlock.**

The server automatically unlocks data blocks that are locked for the maximum time allowed. The maximum amount of time that locks are in force is defined by the Essbase System Administrator to ensure that blocks are not locked for extended periods of time. The Essbase System Administrator can unlock data blocks at any time.

Related Topics

Retrieving Data Using Functions

The Essbase cell retrieve function, EssCell, retrieves one database value into a cell. You can enter an EssCell function directly into a worksheet or select an EssCell function from the worksheet menu bar. You must be connected to a database to use EssCell.

➤ To retrieve data using the EssCell function:

1 **Select the cell in the worksheet where you want to retrieve data**

2 **Enter the function using this syntax:**

```
=EssCell(mbrList)
```

Where *mbrList* is one of these:

- **A null value**—If the parameters of the function are empty, Essbase returns the data value from the top of each dimension.

- **A comma-separated list of member names**—Member names must be enclosed in double quotation marks, with only one member per dimension allowed. If you omit members from a dimension, the function returns the data value from the top member of each unspecified dimension. You can include alias names in the member list.

- **A worksheet cell reference**—The reference must point to a cell containing a member name. Member names, such as 200 and 300-10, must be formatted as text cells, rather than numeric cells.

3　Select **Essbase**, and then **Options**.

4　To preserve the formula, in **Mode**, select **Retain on Retrieval**.

5　Click **OK**.

6　Select **Essbase**, and then **Retrieve**.

EssCell retrieves data when you perform a retrieval or recalculate the worksheet through the spreadsheet.

Tip:　If the worksheet contains many EssCell functions, change the spreadsheet to manual calculation mode (see the Excel documentation). This change prevents the cells that contain EssCell functions from calculating until you retrieve data or calculate the worksheet manually.

If EssCell is unsuccessful, Essbase returns one of these error messages in the cell containing the EssCell function:

- #N/A—Worksheet not connected to a database.

- #VALUE!—Invalid member name in list or reference.

- #NAME?—Text name in the function was not double-quoted.

Note:　You must enclose all member names (including numeric member names) and NULL in double quotation marks.

➤　To enter an EssCell function into a worksheet using the Excel Function Wizard:

1　From the Excel menu bar, select **Insert**, and then **Function**.

2　From the **Function Category** list, select **Essbase Add-in**.

The Excel Function Wizard instructs you in defining the EssCell function.

Related Topics

4

Drilling, Pivoting, and Retaining Data

Drilling Up to Less Detail

Drilling up to less detail enables you to navigate to higher levels in the multidimensional database.

➤ To drill up to less detail:

1   Select the member on which to drill up.

2   Select **Essbase**, and then **Zoom Out**.

> **Note:**   You can drill up on a shared member; however, the results that are retrieved depend on the report layout. See "Drilling Down or Up On Shared Members" on page 61.

Related Topics

"Drilling Down to More Detail" on page 54

"Using Mouse Actions to Pivot, Retrieve, and Drill Up and Down" on page 60

Drilling Down to More Detail

Drilling down to more detail enables you to navigate down to lower levels in the multidimensional database.

You can specify which members are returned to the worksheet during a drill-down operation. The Zoom In option group contains items that enable you to customize drilling behavior. For example, if you select Bottom Level, Essbase retrieves data for the lowest level of members in a dimension.

The Member Retention option group contains items that enable you to customize drilling retention characteristics. The default selection, Include Selection, retains the selected member and the other members retrieved as a result of a drill down. For example, if you drill down on Qtr1, Essbase retrieves data for Jan, Feb, and Mar, and for Qtr1. When this option is disabled, Essbase retrieves data only for Jan, Feb, and Mar; Qtr1 is eliminated.

See also "Zoom Page (Essbase Options Dialog Box)" on page 371.

➤ To drill down to more detail:

1   Select the member on which to drill down.

2   Select **Essbase**, and then **Zoom In**.

Because spreadsheets can accommodate more rows than columns, Essbase retrieves data into rows, by default, when you drill down on a member.

➤ To drill across columns, press **Alt** while double-clicking the member name you want to expand, and then release **Alt**.

Essbase expands the data into columns.

Notes:

- Drilling across columns applies only to top-level members of a dimension, also known as dimension or title members (for example, Products in Sample Basic).

- If the spreadsheet contains spaces between rows, and you drill down on a member, Essbase mirrors the spaces in the resulting report.

- You cannot drill down on a Dynamic Time Series member.

- You can drill down on shared members; however, the results that are retrieved depend on the report layout. See "Drilling Down or Up On Shared Members" on page 61.

Related Topics

"Drilling Up to Less Detail" on page 53

"Using Mouse Actions to Pivot, Retrieve, and Drill Up and Down" on page 60

"Drilling Down to a Sample of Members" on page 55

Sampling Data

About Metadata Sampling

Essbase is a multidimensional database engine that provides support for ad hoc analysis. Such analysis is driven by the intuition of the analyst and can be time-consuming as data volume increases. Large cubes tend to contain more dimensions and sometimes more levels, making hierarchical navigation very cumbersome.

By drilling down to a sample of members you can quickly analyze a large multidimensional database with a focus on data trends or approximate information in the initial stages. This type of drilling down to a sample of members is also referred to as "metadata sampling."

Metadata sampling enables you to drill down on all members that you specify, whether they reside in Essbase or, if you are using Hybrid Analysis, in an underlying relational database.

Notes on Sampling

- Metadata sampling does not support drill down on level 0 attribute members
- When sampling is enabled, a combination of the algorithms used by Essbase and the sampling percentage you set sometimes enable these scenarios:
  - During a Zoom In operation, if a dimension is small, no members are retrieved.
  - During a Zoom In operation, if the sampling percentage is very small, all members are retrieved.
- When drilling down on Hybrid Analysis, these limitations apply:
  - Sampling with the All Levels option is not supported with Hybrid Analysis members.
  - Sampling with Same Level and Same Generation options is not supported.

Related Topics

Drilling Down to a Sample of Members

To drill down to a sample of members, you must connect to a server, an application, and a database. Next, enable sampling in Spreadsheet Add-in and set a percentage amount of data to query when drilling down to more detail (performing a Zoom In operation).

➤ To drill down to a sample of members:

1   To enable sampling, select **Essbase**, and then **Sample Data (Zoom In)**.

    A check mark displayed next to the Sample Data (Zoom In) menu item indicates that sampling is enabled.

2   Select **Essbase**, and then **Options**.

3   In **Essbase Options**, select **Zoom**.

4   In **Sampling Percentage**, enter an integer between 1 and 100 to represent the approximate percentage of the Essbase cube to query during a Zoom In operation.

The default value is 100.

> **Note:**   If Hybrid Analysis is enabled and in use, the sampling percentage also applies to queries on the underlying relational database.

5   To save these settings, click **OK**.

6   In the spreadsheet, select the member on which to drill down.

7   Select **Essbase**, and then **Zoom In**.

For example, if you entered 50 in the Sampling Percentage box, approximately 50% of the members in the Essbase database, and, if applicable, from the specified columns of the relational database, are queried when you select Zoom In.

➤   To drill down to a sample of detail across columns, press **Alt** while double-clicking the member name to expand, and then release **Alt**.

Essbase expands the data into columns.

Related Topics

Pivoting Data

Pivoting enables you to transpose rows or columns groups and move data from rows to columns and from columns to rows using a drag operation.

➤   To pivot data:

1   Select the data to pivot.

2   Select **Essbase**, and then **Pivot**.

Alternatively, press the secondary mouse button and drag the selection to the destination cell. Release the mouse button after you reach the destination cell.

The member label box is displayed under the cursor during the pivot operation, and it lists the names of the members that you are pivoting. The *orientation* of the member label box, however, does not determine the orientation of the pivot result. Essbase determines the data orientation by the location of the destination cell.

Whenever the source cell and the destination cell are members of different row groups, Essbase exchanges the member groups. You must select a destination cell containing a member name to exchange row members. You can also exchange column members by choosing a destination cell in another column containing a member name.

Related Topics

Pivoting on Formatted Worksheets

The pivot capability is intended to be used as a method of producing ad hoc reports. Pivot can operate on a formatted worksheet; however, a formatted worksheet can contain labels and formulas that cause ambiguous results. The pivot is designed to compress and retain only the database elements represented in the worksheet.

Notes:

- Essbase prevents pivot operations on worksheets that contain formulas when Formula Preservation mode is active.

- When you pivot a group of members, Essbase keeps only unique members from dimensions not involved in the pivot. A pivot action eliminates rows or columns in which all cells are empty.

Restoring the Previous Database View

The FlashBack command restores the previous database view. A database view is the view of the spreadsheet after performing Zoom In, Zoom Out, Keep Only, Remove Only, or Retrieve operations. FlashBack is similar to the Excel Undo command, which reverses the last action, with these differences:

- If you modify member information between retrievals and perform a FlashBack, Essbase flashes back to the spreadsheet data as it was before the last retrieval, despite changes that you made to members between retrievals. The FlashBack command uses your computer memory to store the current view before processing a retrieval request.

- You can use FlashBack to undo only the most recent operation. FlashBack cannot undo multiple operations.

➤ To restore the previous database view, select **Essbase**, and then **FlashBack**.

Essbase undoes the last command and returns the previous database view.

You can disable FlashBack during normal operations to conserve memory on your local computer.

➤ To disable FlashBack:

1 Select **Essbase**, and then **Options**.

2 In **Global**, clear **Enable Flashback**.

Related Topics

"Drilling Down to More Detail" on page 54

"Drilling Up to Less Detail" on page 53

"Using Mouse Actions to Pivot, Retrieve, and Drill Up and Down" on page 60

"Pivoting Data" on page 56

"Removing Data Sets" on page 58

"Retaining Data Sets" on page 58

Retaining Data Sets

The Keep Only command retains only selected members of a dimension and removes all other data from your spreadsheet view. This command provides a powerful way to remove dimensional slices without having to delete individual cells.

➤ To retain a set of data:

1 Select the range of data you want to keep (press **Shift** to select multiple adjacent set of cells).

2 Select **Essbase**, and then **Keep Only**.

If data you want to retain does not lie in a continuous range of cells, press Ctrl while selecting the cells to keep nonadjacent cells.

Related Topics

"Drilling Down to More Detail" on page 54

"Drilling Up to Less Detail" on page 53

"Removing Data Sets" on page 58

Removing Data Sets

The Remove Only command works similarly to the Keep Only command except that it removes only selected members of a dimension and keeps all other data in your spreadsheet view.

➤ To remove a set of data:

1 Select the range of data you want to remove (press **Shift** to select multiple adjacent set of cells).

2 Select **Essbase**, and then **Remove Only**.

Occasionally, data you want to remove does not lie in a continuous range of cells. In this case, press Ctrl while selecting the cells to remove nonadjacent cells.

Related Topics

"Drilling Down to More Detail" on page 54

"Drilling Up to Less Detail" on page 53

"Retaining Data Sets" on page 58

Navigating Through Worksheets Without Retrieving Data

The Navigate Without Data option enables you to perform navigational operations such as Pivot, Zoom In, Zoom Out, Keep Only, and Remove Only without retrieving data into the worksheet.

This feature is useful when dealing with Dynamic Calc members, which are usually specified by the application designer. When Navigate Without Data is selected, Essbase does not dynamically calculate values (that is, calculate the database during retrieval) while you are creating the spreadsheet report.

➤ To navigate through the worksheet without retrieving data:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Global**.

3 Under **Mode**, select **Navigate Without Data**.

4 Click **OK**.

➤ To turn off Navigate Without Data when you are ready to retrieve data:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Global**.

3 Under **Mode**, clear **Navigate Without Data**.

4 Click **OK**.

5 Select **Essbase**, and then **Retrieve**.

Note: You turn Navigate Without Data on and off by selecting or clearing the Navigate Without Data option or using the toolbar icon.

Navigating without data also works with the Keep Only and Remove Only commands.

Related Topics

"Retrieving Dynamic Calc Members" on page 43

Enabling Compatibility Between Spreadsheet Add-in and Smart View

If Smart View and Spreadsheet Add-in are installed on one computer, you must complete this procedure to ensure that Spreadsheet Add-in functions properly alongside Smart View.

➤ To enable compatibility between Spreadsheet Add-in and Smart View:

1 Start **Excel.**

2 Select **Essbase**, and then **Options.**

3 In **Global**, under **Mouse Actions**, select **Limit to Connected Sheets**.

When Spreadsheet Add-in and Smart View are installed on one computer, and this option is selected, mouse clicks are ignored by Spreadsheet Add-in if the worksheet being acted upon is connected to a data source other than an Essbase application and database (for example, an Oracle Hyperion Planning, Fusion Edition data source).

4 Click **OK.**

Using Mouse Actions to Pivot, Retrieve, and Drill Up and Down

You can use the primary and secondary mouse buttons to perform operations such as pivoting, retrieving, and drilling.

➤ To retrieve or drill down on data using the mouse button:

1 Select **Essbase**, and then **Options.**

2 In **Global**, select **Enable Double-Clicking**.

3 Select a data cell to retrieve data or select a member to drill down on.

4 Double-click the primary mouse button to retrieve or drill down.

➤ To drill up on data using the mouse button:

1 Select **Essbase**, and then **Options.**

2 In **Global**, select **Enable Double-Clicking**.

3 Select **Enable Secondary Button**.

4 Select a member to drill up on.

5 Double-click the secondary mouse button to drill up.

➤ To pivot data using the mouse button:

1 Select **Essbase**, and then **Options.**

2 In **Global**, select **Enable Secondary Button**.

3 Select the member you want to pivot.

4 Hold down the secondary mouse button and drag the selection to another location.

Related Topics

Enabling Double-Clicking to Browse LROs

You can set the primary mouse button to display the Linked Objects Browser dialog box when you double-click a linked object cell.

➤ To set the primary mouse button to browse LROs:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Global** and select **Enable Double-Clicking**.

3 Select **Enable Linked Object Browsing**.

> **Note:** You can also select the Linked Objects command to open the Linked Objects Browser dialog box.

Related Topics

Drilling Down or Up On Shared Members

You can drill down or drill up on a member containing a shared member defined in the Essbase outline. Essbase Server determines which member you are working with, the base member or the shared member. Depending on the worksheet and which members are the closest to the member that you are drilling up or drilling down on, Essbase Server decides which member you are querying and retrieves the information accordingly.

Here is an example outline:

```
Product
   100
      150 (regular member)
         100-10
         100-20
   Test1
      150 (shared member)
```

Note that the regular member 150 contains children; the shared member 150 does not. Drilling up and down on 150 gives different results.

- Drilling down on 150 returns nothing if interpreted as the shared member; or, return 100 10 and 100-20 if interpreted as the regular member.

- Drilling up on 150 returns Test1 if interpreted as the shared member; or, return 100 if interpreted as the regular member.

The proximity of the shared member to the regular member gives different results when drilling down:

- If Test1 is on the worksheet and very close to 150, Essbase Server understands that 150 is the shared member and drilling down does not result in the children, 100-10 and 100-20.

- If Test1 is not on the worksheet or members are in between them, Essbase Server understands 150 to be the regular member so drilling down results in the children 100-10 and 100-20.

Proximity of the shared member to the regular member gives different results when drilling up:

- When drilling up on a member containing a shared member, Essbase Server looks at the members in the worksheet to determine which one is being queried.

  For example, using the Sample Basic application and database, drilling up on 100 20 sometimes returns Diet and returns 100. It depends on whether Diet or 100 is closest to the member 100-20. If 100-20 is alone, Essbase Server determines that this is the regular member. If Diet is close, 100-20 may be interpreted as the shared member.

Drilling Down on Level 0 Attributes

You can use the Essbase attribute feature to retrieve and analyze in terms of characteristics, or attributes, of dimensions. For example, you can analyze product profitability based on the attributes of size or packaging. Attribute dimensions are associated with base dimensions.

You can use an attribute dimension to drill down on the base dimension with which it is associated. In the Sample Basic database, the Product base dimension is associated with several attribute dimensions, such as Caffeinated, Ounces, and Pkg_Type. Each attribute dimension consists of level 0 attribute members. Level 0 attribute members are the lowest level attributes that are associated with members of a base dimension. The Pkg_Type attribute dimension, for instance, contains two level 0 members, Bottle and Can.

You can extract information on all products sold in a can by entering manually the name Can in the worksheet. You can also use Query Designer or the Essbase Member Selection dialog box to select the attribute and display it in the worksheet.

➤ To drill down on an attribute dimension:

1   Open a worksheet.

2   Connect to the Sample Basic database.

3   Select **Essbase**, and then **Retrieve**.

4 Select **Product** and, to replace it, enter `Can`.

5 Click anywhere outside of cell C1 and select **Essbase**, and then **Retrieve**.

6 Drill down to all products sold in a can by double-clicking **Can** in cell C1.

Cola, Diet Cola, and Diet Cream are the members of Product with the Can attribute.

See Also

Drill-Down Behavior for Level 0 Attribute Members

Drilling down on level 0 attributes produces results that differ from other types of drill-down actions in Spreadsheet Add-in. Level 0 attribute members are the lowest level attributes that are associated with members in a base dimension. A base dimension can be associated with several attribute dimensions. An attribute dimension is associated with a base dimension. For example, in the Sample Basic database, Caffeinated is an attribute dimension associated with the base dimension Product. Caffeinated_True and Caffeinated_False are level 0 attribute members of the Caffeinated attribute dimension.

Currently, every dimension in the database must be represented in the worksheet before you can retrieve data. Attribute dimensions and their members can represent their base dimension in the worksheet. When you retrieve into a blank worksheet, the default layout displays the standard dimensions in the database, such as Product, Year, Market, Measures, and Scenario in the Sample Basic database.

To view an attribute in the worksheet, enter its name manually or use Query Designer or the Essbase Member Selection dialog box to select the attribute and display it in the worksheet.

Note: Sampling does not support drill down on level 0 attribute members.

The general guidelines for drilling down on level 0 attributes are:

- If a level 0 attribute member is in a column, a drill down pivots the attribute to the innermost row of the worksheet.

- If a level 0 attribute member is in a row, a drill down does not change the position of the attribute in the worksheet.

- A drill down on a level 0 attribute member displays the associated base members to the right of the level 0 attribute.

- If the worksheet contains multiple level 0 attribute members, a drill down on one attribute displays other attributes to the left of the level 0 attribute member. Level 0 attribute members in the columns pivot to rows, and level 0 attribute members in rows remain in a row.

- A drill down on non-level 0 attribute members matches the current drill down behavior for other types of members.

These scenarios are typical of those using level 0 attribute members:

Level 0 Attribute Drill-Down Behavior - Scenario A

In this scenario, the base dimension (Product) is not present in the worksheet and the level 0 attribute member (Caffeinated_True) is in a column. A drill down on Caffeinated_True pivots it to the innermost row. The members of the base dimension associated with the level 0 attribute member display to the right of the row.

Before drill down: Caffeinated_True is in a column.

	A	B	C	D	E
1		Measures	Caffeinated_True	Market	Scenario
2	Year	73570			
3					
4					

After drill down: Caffeinated_True pivots to a row inside of Year. 100-10, 100-20, 200-10, 200-20, 300-10, 300-20, and 300-30 are members of Product with the attribute Caffeinated_True. These members are displayed in a row to the right of Caffeinated_True.

	A	B	C	D	E	F
1				Measures	Market	Scenario
2	Year	Caffeinated_True	100-10	22777		
3			100-20	5708		
4			200-10	7201		
5			200-20	12025		
6			300-10	12195		
7			300-20	2511		
8			300-30	11093		

Level 0 Attribute Drill-Down Behavior - Scenario B

In this scenario, the base dimension (Product) is not in the worksheet and the level 0 attribute member (Caffeinated_True) is in a row. A drill down on Caffeinated_True does not change its

location, but displays the members of the base dimension associated with Caffeinated_True to the right of the row.

Before drill down: Caffeinated_True is in a row.

	A	B	C	D	E
1			Measures	Market	Scenario
2	Caffeinated_True	Year	73570		
3					
4					

After drill down: Caffeinated_True remains in the same location. 100-10, 100-20, 200-10, 200-20, 300-10, 300-20, and 300-30 (members of Product with the Caffeinated_True attribute) are displayed in a row next to Caffeinated_True.

	A	B	C	D	E	F
1				Measures	Market	Scenario
2	Caffeinated_True	100-10	Year	22777		
3		100-20	Year	5708		
4		200-10	Year	7201		
5		200-20	Year	12025		
6		300-10	Year	12195		
7		300-20	Year	2511		
8		300-30	Year	11093		

Level 0 Attribute Drill-Down Behavior - Scenario C

In this scenario, the base dimension, Product, is in a column and the level 0 attribute member, Caffeinated_True, is in a row. A drill down on Caffeinated_True pivots Product to a row and displays the members of Product associated with Caffeinated_True in the same row as Product.

Before drill down: Caffeinated_True is in a row and its base dimension, Product, is in a column.

	A	B	C	D	E	F
1		Year	Measures	Product	Market	Scenario
2	Caffeinated_True	73510				
3						

After drill down: Caffeinated_True remains in the same location. Product pivots to a row next to Caffeinated_True, and 100-10, 100-20, 200-10, 200-20, 300-10, 300-20, and 300-30 (members of Product with the Caffeinated_True attribute) are displayed next to Caffeinated_True.

	A	B	C	D	E	F
1			Year	Measures	Market	Scenario
2	Caffeinated_True	100-10	22777			
3		100-20	5708			
4		200-10	7201			
5		200-20	12025			
6		300-10	12195			
7		300-20	2511			
8		300-30	11093			
9		Product	73510			
10						

Level 0 Attribute Drill-Down Behavior - Scenario D

In this scenario, base dimension (Product) and level 0 attribute member (Caffeinated_True) are in a column. A drill down on Caffeinated_True pivots it to a row. Product pivots to the right of the row and displays its members associated with Caffeinated_True.

Before drill down: Caffeinated_True and its base dimension (Product) are in the columns of the worksheet.

	A	B	C	D	E	F
1		Measures	Product	Market	Scenario	Caffeinated_True
2	Year	73570				
3						
4						

After drill down: Caffeinated_True and Product pivot to a row. 100-10, 100-20, 200-10, 200-20, 300-10, 300-20, and 300-30 (members of Product with the Caffeinated_True attribute) are displayed in the column next to Caffeinated_True.

	A	B	C	D	E	F
1				Measures	Market	Scenario
2	Year	Caffeinated_True	100-10	22777		
3			100-20	5708		
4			200-10	7201		
5			200-20	12025		
6			300-10	12195		
7			300-20	2511		
8			300-30	11093		
9			Product	73510		
10						

Level 0 Attribute Drill-Down Behavior - Scenario E

In this scenario, two level 0 attribute members (Caffeinated_True and Can) are present in a column. A drill down on one of them pivots all level 0 attribute members to a row, placing all other attributes, including non-level 0 attributes, to the left of the level 0 attribute member. The members associated with the level 0 attribute members display to the right of the rows.

Before drill down: Caffeinated_True and Can (level 0 attribute members associated with Product) are in the columns of the worksheet.

	A	B	C	D	E	F
1		Measures	Caffeinated_True	Market	Scenario	Can
2	Year	39578				
3						

After drill down: Drilling down on Caffeinated_True pivots level 0 attribute members into rows. Can displays to the left of Caffeinated_True. 100-10, 100-20, and 300-30 (members of Product with the Caffeinated_True and Can attributes) display to the right of Caffeinated_True.

	A	B	C	D	E	F	G
1					Measures	Market	Scenario
2	Year	Can	Caffeinated_True	100-10	22777		
3				100-20	5708		
4				300-30	11093		
5							

5

Formatting Text and Cells

About Formatting Text and Cells

A spreadsheet report displays many hierarchical levels of database information. Styles are an effective way of viewing and distinguishing data in Spreadsheet Add-in. Styles provide visual clues that enable you to keep track of database members, dimensions, and cell functions.

When you define styles, your choices are saved to the Windows Registry on your local computer. You can define one set of styles per database.

Changing Member Name Fonts and Colors

You can apply visual cues, or styles, to member names to distinguish them from other types of members in the worksheet.

➤ To change fonts and colors of parent, child, shared, Dynamic Calc members, attributes, or members containing formulas:

1   Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Style**.

The Style page is available only when you are connected to a database.

3 Under **Members**, select **Parent**, **Child**, **Shared**, **Contains Formula**, **Dynamic Calculations**, or **Attributes**.

4 Click **Format**.

5 In **Font**, specify the font, font size, font style, color, and effects.

An example of the selected style is displayed in the Sample box.

6 Click **OK**.

7 Repeat step 3 through step 6 to change styles for other member types.

8 To apply the styles to the worksheet, select **Display**, and then **Use Styles**.

9 Click **OK**.

10 To display the styles in the worksheet, select **Essbase**, and then **Retrieve**.

Related Topics

"Changing Data Cell Fonts and Colors" on page 71

"Changing Dimension Member Fonts and Colors" on page 70

"Clearing Styles from Worksheets" on page 73

"Precedence of Overlapping Styles" on page 71

Changing Dimension Member Fonts and Colors

You can apply visual cues, or styles, to all members of a dimension to distinguish them from other cells. If the database contains attribute dimensions, you can apply a style for them.

➤ To change fonts and colors of the members in one dimension:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Style**.

3 Under **Dimensions**, select the dimension to apply the style.

4 Click **Format**.

5 In **Font**, specify the font name, size, style, color, and effects for the dimension.

An example of the selected style is displayed in the Sample box.

6 Click **OK**.

7 In **Background Color**, select the cell background color .

8 To apply a border to cells, select **Cell Border**.

9 Repeat step 3 through step 8 to set styles for other dimensions.

10 To apply styles to the worksheet, select **Display**, and then **Use Styles**.

11 Click **OK**.

12 To display the styles in the worksheet, select **Essbase**, and then **Retrieve**.

Related Topics

Changing Data Cell Fonts and Colors

You can apply styles to data cells, such as read-only cells, read/write cells, linked object cells, and Integration Server drill-through cells to distinguish them from other cells in the worksheet.

➤ To change the fonts and colors of data cells:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Style**.

3 Under **Data Cells**, select **Linked Objects**, **Integration Server Drill-Through**, **Read Only**, or **Read/Write**.

4 Click **Format**.

5 In **Font**, specify the font, font size, font style, color, and effects.

An example of the selected style is displayed in the Sample box.

6 Click **OK**.

7 Repeat step 3 through step 6 to change styles for other types of data cells.

8 To apply styles to the worksheet, select **Display**, and then **Use Styles**.

9 Click **OK**.

10 To display the styles in the worksheet, select **Essbase**, and then **Retrieve**.

Related Topics

Precedence of Overlapping Styles

Essbase uses this order of precedence when applying multiple text styles:

- Linked object cells

- Integration Server Drill-Through cells

- Read-only cells

- Read/write cells

- Parent member cells

- Child member cells

- Shared member cells

- Cells containing formulas

- Dynamic calculation member cells

- Attribute cells

- Dimension cells

The only way you can apply a background color to data is to define a style for dimensions. If dimension styles are defined and the Use Styles setting is turned on, a background color is defined for members of a dimension.

The text styles that you can apply to members, dimensions, and data cells are hierarchical and determine which characteristics are applied. Member styles are at the top of the hierarchy. Thus, member styles are applied if styles are turned on.

If you want to see a child member style, ensure that the parent member style is turned off. If you want to see a shared member style, ensure that parent and child member styles are turned off.

For example, suppose you defined blue as the font color for linked objects and red for read-only cells. If a cell is tagged as a read-only cell and linked object cell, Essbase displays blue font color for the cell because the linked objects style overrides the read-only style.

Applying Style Settings to Worksheets

After you finish specifying Styles for the members, dimensions, and data cells using the Style page in the Essbase Options dialog box, you must apply the styles in the worksheet.

➤ To apply selected styles:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Cells**, select **Use Styles**.

4 Click **OK**.

5 Select **Essbase**, and then **Retrieve**.

Related Topics

"Changing Data Cell Fonts and Colors" on page 71

Clearing Styles from Worksheets

Visual cues, or styles, are a great way to help visualize data in Spreadsheet Add-in. Applying styles, however, involves additional processing time during a retrieval request. This additional processing impacts retrieval speed slightly.

If you do not want to apply styles to the worksheet, you can clear them. You can also turn off styles so that they are not displayed when you refresh the view (by selecting Essbase, then Retrieve, for example).

If styles are applied to the worksheet and you execute the FlashBack command, these styles are temporarily removed from the current view. The styles are reapplied whenever you initiate a retrieval.

➤ To remove all styles from the worksheet:

1 Select all cells in the worksheet.

2 From the Excel menu bar, select **Edit**, then **Clear**, and then **Formats**.

➤ To turn off styles:

1 Select **Essbase**, and then **Options**.

2 In **Display**, under **Cells**, clear **Use Styles**, and then click **OK**.

> Note: If you turn off styles without clearing them from the worksheet, the styles remain in the current worksheet view when you refresh the view. The styles remain to avoid removing styles that you may apply to individual cells using native worksheet formatting options.

Related Topics

Indenting Member Names

Indenting member names enables you to more easily view relationships between members in the worksheet.

➤ To indent member names in the worksheet:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Indentation**, select an option:

- **None**—Member names are not indented in the worksheet column.

- **Subitems**—Only descendants are indented; ancestors are left-aligned in the worksheet column.

- **Totals**—Only ancestors are indented; descendants are left-justified in the worksheet column.

4 Click **OK**.

Related Topics

Suppressing Missing Values, Zeros, and Underscore Characters

Several types of data can be returned to a worksheet view:

- Numeric data values

- #NoAccess strings, which are displayed when you cannot access a data value

- #Missing strings, which indicate that no data exists for that member intersection

  A missing value is not the same as a zero value that is loaded into the Essbase database. When data does not exist for a data cell in Essbase, a value of #Missing is returned to the worksheet. (If a cell in a row contains a value, that row is not suppressed on a retrieval.)

- Zero data values

Using Essbase, you can suppress the display of missing and zero values in the worksheet, and underscore characters contained in member names.

➤ To suppress the display of rows containing missing values, zeros, or underscore characters in the worksheet:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Suppress**, select an option:

- **#Missing Rows**—Suppresses rows containing missing values.

- **Zero Rows**—Suppresses rows containing zeros.

- **Underscore Characters**—Removes the underscore character from a member name.

4 Click **OK**.

Notes:

- The #Missing Rows and Zero Rows options are not available when you select an option in the Formula Preservation group on the Mode page.

- After you enable the #Missing Rows or Zero Rows suppress option, missing values or zero rows suppressed during a data retrieval are not retrieved again by disabling the feature. If you disable these features in the Essbase Options dialog box, missing values or zero rows are retrieved only from that point on. To return these missing values to the worksheet, disable the Missing Rows or Zero Rows suppress option, drill up on the member, and drill back in.

- When applying the option for suppressing Underscore Characters to member names containing a mixture of spaces and underscores, when you retrieve a second time upon clearing the suppress Underscore Characters option, Essbase cannot retrieve the member names behavior because Essbase expects to find member names containing all spaces or all underscore characters.

Related Topics

Adjusting Cell Columns

➤ To adjust cell column widths to automatically fit the length of a member name or data cell:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Cells**, select **Adjust Columns**.

4 Click **OK**.

Related Topics

Repeating Member Names

By default, Essbase displays member labels once for each set of data, which can be inconvenient, especially if the report is large. Essbase provides a way to repeat the member labels for each cell.

➤ To repeat member names for column and row dimensions in each cell representing a data point:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Cells**, select **Repeat Member Labels**.

4 Click **OK**.

	A	B	C	D	E
1			Measures	Market	Scenario
2	Cola	Jan	1710		
3	Cola	Feb	1666		
4	Cola	Mar	1720		
5	Cola	Qtr1	5096		
6	Cola	Apr	1793		
7	Cola	May	1908		
8	Cola	Jun	2191		
9	Cola	Qtr2	5892		

Notes:

● Essbase retains the repeated members in the worksheet even if you clear Repeat Member Labels. To suppress the repeated members from displaying in the worksheet, perform one action:

● Clear Repeat Member Labels and open another worksheet.

● Clear Repeat Member Labels, pivot the repeated members, and pivot the members again.

● If you did not perform another action since you retrieved, you can use the FlashBack command to return to the previous view before applying the Repeat Member Labels feature.

Related Topics

"Displaying Aliases for Members" on page 77

Replacing Missing and No Access Labels

You can define labels for missing values and for data that you cannot access.

➤ To replace the default names for missing values and inaccessible data:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Under **Replacement**, enter text:

● **#Missing Label**—Specifies a label for missing values.

● **#No Access Label**—Specifies a label for data that you cannot access.

4 Click **OK**.

Missing and No Access labels, however, must *not* match member names or aliases in the outline

If a Missing or No Access label matches a member name or alias, drilling down on that label returns errors.

➤ To fix these errors:

1   Select **Essbase**, and then **Options**.

2   In **Essbase Options**, select **Display**.

3   Under **Replacement**, delete the matching label from #Missing Label or No Access Label, and then click **OK**.

4   Select **Essbase**, and then **Options**, again.

5   Click **OK**.

Related Topics

Displaying Aliases for Members

Aliases are alternate names for database members. You can create reports that use the database member name, which is often a stock number or product code, and display the member alias name, which can be more descriptive than the member name, in the worksheet reports. For example, in the Sample Basic database, the alias name for the Product member 100 is Colas. The Application Designer defines alias names for members using the Alias Table in Administration Services Console.

➤ To display a member alias name, rather than its database name:

1   Select **Essbase**, and then **Options**.

2   In **Essbase Options**, select **Display**.

3   Under **Aliases**, select an option:

    ● **Use Aliases**—Uses aliases from the selected alias table.

    ● **Use Both Member Names and Aliases for Row Dimensions**—Uses member and alias names for row dimension members.

4   Click **OK**.

    Note: The order in which the members appear on one row can affect whether the alias member combination is displayed at retrieval. Alias member combinations work only when depending members are specified before the member defined in the alias combination.

Related Topics

Working with Duplicate Member Names

About Duplicate Member Names

An Essbase database may contain duplicate member names.

Users can view the *qualified* name of a member directly on the worksheet or by using the Comment functionality of Excel. The qualified name includes the member name and the names of its ancestors to the level that uniquely defines the member.

The qualified member name is displayed in this format:

```
[DifferentiatingAncestor].[Ancestors...].[Member]
```

The number of members in the qualified member name depends on the number of levels needed to uniquely define the duplicate member.

You can display the qualified member name as a cell comment. If a member is a duplicate, the cell contains a cell comment indicator. Hover over the comment indicator to view the qualified member name. You may also opt to display the qualified member name directly on the worksheet.

Note that in the Essbase Member Selection dialog box in Spreadsheet Add-in, if duplicate members are selected, you can hover over the duplicate member names in the Rules list box to view the qualified member name regardless of the comment settings made in Excel.

When viewing the qualified member name as a cell comment, you see the qualified member name between the `<esskey></esskey>` identifier; for example:

```
<esskey>[East].[New York]</esskey>.
```

After a Save or Save As operation, the qualified member name in the cell comment field is displayed between the `<esskey></esskey>` and `<essdisp></essdisp>` identifiers; for example:

```
<esskey>[East].[New York]</esskey><essdisp>[East].[New York]</essdisp>
```

Do not edit the text between the `<esskey></esskey>` identifier or the `<essdisp></essdisp>` identifier (which is displayed after a save operation until the next Retrieve). These identifiers appear in the comment field regardless of the Qualified Member Name display settings. Changing the text between the identifiers may invalidate the worksheet.

Note that you can enter comments before or after the identifiers and that these comments are retained by Essbase with each retrieval.

Duplicate Member Names Example

In this example, an Essbase outline that supports duplicate member names contains the member name "Albany" under the New York and California members in a Market dimension and in a Customer dimension:

```
Customer
|
|___California
| |
| |___Albany
|
|___New York
|
|___Albany

Market
|
|___California
| |
| |___Albany
|
|___New York
|
|___Albany
```

With duplicate member name support, Essbase can display "Albany" under New York and California in the Market and the Customer dimensions on the worksheet.

For this example, assume that on the Display page of the Essbase Options dialog box, only the "Show Qualified Member Names as Comments" option is selected. In Excel, the "Comment Indicator Only" option is selected.

In the worksheet, using the example of the duplicate name "Albany," if you hovers over the indicator for Albany, New York, in the Market dimension, the cell comment reads:

```
<esskey>[Market].[New York].[Albany]</esskey>
```

If you hover over the comment indicator for Albany, New York, in the Customer dimension, the cell comment reads:

```
<esskey>[Customer].[New York].[Albany]</esskey>
```

In the two examples above, because each member, Albany, had a parent, New York, the dimension level, Customer and Market, was the level that uniquely identified the member, Albany.

Further, if you hover over the comment indicator for Albany, California, in the Customer dimension, the cell comment reads:

```
<esskey>[Customer].[California].[Albany]</esskey>
```

In a complex worksheet, the cell comment enables the user to easily pinpoint a member combination.

Using the above examples, if you select the "Show Qualified Member Names on Sheet" option on the Display page of the Essbase Options dialog box, for the instances of Albany in the

Customer and Market dimensions, the qualified member name is displayed directly on the worksheet.

Note: To show qualified member names as comments, you must enable the "Comment Indicator only" option in Excel.

Displaying Duplicate Member Names

➤ To display duplicate member names

1 Select **Essbase**, and then **Options**.

2 In **Display**, select one or more options from **Duplicate Members**:

- **Show Qualified Member Names on Sheet**—View qualified member names on the worksheet.

- **Show Qualified Member Names as Comments** View qualified member names when the cursor hovers over the comment indicator in a cell. When you use this option, ensure that the **Comment indicator only** option of Excel is selected.

   Note: These options are only available when you are connected to an application and database that supports duplicate member names.

3 Click **OK**.

   Note: To show qualified member names as comments, you must enable the "Comment Indicator only" option in Excel.

Related Topics

"About Duplicate Member Names" on page 78

"Duplicate Member Names Example" on page 79

Enabling Spreadsheet Options with Query Designer

You can apply the spreadsheet options that you set in the Essbase Options dialog box to the results of a Query Designer query.

➤ To enable spreadsheet options with Query Designer:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Select **Use Sheet Options with Query Designer**.

4 Click **OK**.

6 Creating Multiple Worksheets from Data

Specifying the Worksheet Detail Level

The cascade feature enables you to create multiple worksheets from one database view. This feature is useful when you want to distribute various worksheets across your organization. You can specify at what level of detail you want to replicate worksheets to tailor the information to the needs of each recipient.

Note: You can create cascade reports based on attribute members.

➤ To select the level of detail to replicate worksheets:

1 Select a member from the source worksheet to perform a cascade.

2 Select **Essbase**, and then **Cascade**.

3 From **Essbase Cascade Options**, select **Cascade Information**.

4 Select an option:

- **Next Level**—Replicates worksheets using children of each cascade member.
- **All Levels**—Replicates worksheets using descendants of each cascade member.
- **Bottom Level**—Replicates worksheets using bottom levels of each cascade member.
- **Sibling Level**—Replicates worksheets using siblings of each cascade member.
- **Same Level**—Replicates worksheets using same levels of each cascade member.
- **Same Generation**—Replicates worksheets using the same generation as each cascade member.

- **Formulas**—Replicates worksheets using all members in the formula of each cascade member.

Related Topics

Specifying Multiple Worksheet Names

Using the Cascade command, you can assign customized prefixes and suffixes to the replicated worksheets. The Prefix and Suffix boxes enable you to assign a prefix and suffix to file names Essbase creates, respectively. The default is to generate worksheet names that are numbered from 1 through n, where n is the total number of worksheets to create. The syntax for file names is `PrefixnSuffix.xls`.

When the One Workbook, Separate Sheets option is applied, the Workbook box enables you to specify a name for the workbook. By default, Essbase uses the same naming convention specified for the prefix and suffix to name the worksheets within a workbook.

➤ To specify the file name of replicated worksheets:

1 Select **Essbase**, and then **Cascade**.

2 From **Essbase Cascade Options**, select **Destination Options**.

3 Under **Naming Information**, enter the prefix for the worksheet name in **Prefix**.

When you assign a prefix or suffix in the Naming Information group box, the worksheet files that are generated as a result of executing the Cascade command are named with the prefix or suffix that you specify. The default is to generate worksheet names that are numbered 1 through n, where n is the total number of worksheets created.

The syntax for the file names is `PrefixnSuffix.xls` for Excel. If you do not specify a prefix or suffix, Essbase creates the worksheets `1.xls`, `2.xls`, and so on. If you are creating one workbook, the same naming convention is used for the worksheet names within the workbook.

4 Enter the suffix for the worksheet name in **Suffix**.

Caution! Do not specify a prefix and suffix combination that leaves no characters free for Essbase to create unique file names. The prefixes and suffixes you define can be a maximum of 8 characters each; however, your system may truncate the file

name to use only a total of 8 characters. If file names are duplicated, Essbase overwrites the duplicate file name with the last cascaded worksheet.

5   If you selected **One Workbook, Separate Sheets** under **Destination Types**, enter the name of the workbook under **Workbook**.

See the *Oracle Essbase Spreadsheet Add-in User's Guide* for an example of a report created after a Cascade operation.

Related Topics

Copying Formats into Multiple Worksheets

When creating multiple worksheets with the Cascade command, you can copy the formatting of the source worksheet (that is, styles you set using the Style page of the Essbase Options dialog box), without having to manually apply the formatting to each worksheet.

➤ To copy the format of the source worksheet to multiple worksheets:

1   Select **Essbase**, and then **Cascade**.

2   From **Essbase Cascade Options**, select **Format Options**.

3   Under **Sheet to Sheet Replication**, select **Copy Formatting**.

Copy Formatting does not copy formulas, column formatting, worksheet formatting, or graphs. It does copy styles you set using Essbase and cell formatting you set using the worksheet.

Related Topics

Creating a Table of Contents for Multiple Worksheets

When you create multiple worksheets, you can specify whether Essbase creates a text file that lists all replicated worksheets created, their creation date, and their replicated member content.

➤ To create a table of contents for the replicated worksheets:

1   Select **Essbase**, and then **Cascade**.

2   From **Essbase Cascade Options**, select **Format Options**.

3   Under **Table of Contents**, select **Include Table of Contents**.

Essbase creates a file named `Prefix0Suffix.lst` in the directory you specified, where Prefix and Suffix are prefix and suffix names you specified. If you do not specify a prefix or suffix, the default table of contents file name is `0.lst`. Examples of table of contents file names are `two0.lst`, `Budget0.lst`, and `tran0num.lst`. The prefixes and suffixes you define can be a maximum of 8 characters each; however, your system may truncate the file name to use only a total of 8 characters.

Related Topics

"Copying Formats into Multiple Worksheets" on page 83

"Specifying Multiple Worksheet Names" on page 82

"Specifying the Destination Directory of Multiple Worksheets" on page 84

"Specifying the Worksheet Detail Level" on page 81

"Specifying Output Types of Multiple Worksheets" on page 85

"Suppressing Missing Rows in Multiple Worksheets" on page 85

Specifying the Destination Directory of Multiple Worksheets

When you replicate worksheets, you must specify where you want the worksheets to be created.

➤ To specify the location of the multiple worksheets:

1   Select **Essbase**, and then **Cascade**.

2   From **Essbase Cascade Options**, select **Destination Options**.

3   In **Destination Directory**, enter the directory name where you want the worksheets to be replicated, or click **Browse**.

If you do not specify a directory, Essbase places the worksheets in the local root directory.

Related Topics

"Copying Formats into Multiple Worksheets" on page 83

Specifying Output Types of Multiple Worksheets

You can specify whether you want the replicated worksheets placed into multiple workbooks, one workbook with multiple worksheets, or printer output.

➤ To specify the output type of the multiple worksheets:

1   Select **Essbase**, and then **Cascade**.

2   From **Essbase Cascade Options**, select **Destination Options**.

3   In **Destination Types**, select an option:

   ● Separate Workbooks

   ● One Workbook, Separate Sheets

   ● Printer

Related Topics

Suppressing Missing Rows in Multiple Worksheets

If you do not want to replicate rows containing only #Missing labels, you can specify the option to create replicated worksheets without missing data.

➤ To suppress replicating worksheets containing missing rows:

1   Select **Essbase**, and then **Cascade**.

2   From **Essbase Cascade Options**, select **Format Options**.

3   Under **Sheet Formatting**, select **Suppress Missing Rows**.

   Rows containing only #Missing values are not replicated.

Related Topics

7

Calculating Databases

About Database Calculation

Sending updated data to the server does not automatically recalculate the database. If your access permissions include performing database calculations, you can calculate the database from Spreadsheet Add-in with the Calculation command.

See the *Oracle Essbase Database Administrator's Guide*.

Calculating the Entire Database

If the last calculation was performed on a subset of the data, the entire database may not have been calculated since values last changed. To ensure that the results of calculations are up-to-date, you can run a calculation of the entire database.

➤ To calculate the entire database:

1   Select **Essbase**, and then **Calculation**.

2   From **Essbase Calculation**, click **Calculate**.

An information dialog box is displayed when the database is calculated.

Related Topics

"Calculating Databases Using Calculation Scripts" on page 88

"Essbase Calculation Dialog Box" on page 382

Calculating Databases Using Calculation Scripts

➤ To calculate the database with a calculation script:

1 Select **Essbase**, and then **Calculation**.

2 From **Essbase Calculation**, select from the list of server-based calculations that you can access in **Select Calc Script**.

3 Click **Calculate**.

An information dialog box is displayed when the database is calculated.

Related Topics

Working with Currency Conversions

Organizations with offices in multiple countries generally do business in the currency of the host country (known as the *local* currency). Such organizations must convert data entered in local currencies to a common currency for consolidation and analysis.

A currency conversion application consists of two databases:

● A main database containing data in local and converted values

● A currency rates database containing exchange rates

You apply exchange rates from the currency rates database to local values from the main database to derive converted values. The Essbase Server product installation includes a sample currency conversion application (installation options) that consists of two sample databases: a main database called Interntl and a currency rates database called Xchgrate.

The Sample Interntl database consists of five dimensions: Year, Measures, Product, Market, and Scenario. All but the Market and Scenario dimensions are identical to the Sample Basic database.

The Market dimension includes Toronto, Vancouver, Montreal, Germany, Sweden, Switzerland, and the UK. The Scenario dimension handles different currency types (such as Actual and Budget) in local and converted currencies. In this database, all local currencies are converted to the common currency of U.S. dollars.

The Sample Xchgrate database, which is a subset of the main database, contains four dimensions:

● The CurTime dimension accommodates different exchange rates by month.

● The CurName dimension contains names of currencies from their respective markets.

● The CurCategory dimension contains the names of the various currency categories that may be applied to the categories of Measures. For example, one rate is applied to Profit and Loss items and another rate is applied to Balance Sheet items.

- The CurType dimension enables a currency database to contain rates for various scenarios, such as Actual and Budget.

The *Oracle Essbase Database Administrator's Guide* describes how to design and implement a Currency Conversion application.

8 Defining Queries Using Query Designer

Overview of Query Designer

Query Designer is a component of Spreadsheet Add-in. Query Designer replaces Retrieval Wizard for creating queries for reports. You can also use Query Designer to view attributes in reports.

Note: Excel query functionality is not supported in Spreadsheet Add-in. Use Query Designer to define database queries.

Use Query Designer to:

● Create and modify worksheet queries.

● Specify which dimensions display in rows and columns.

● Quickly select members and attributes to view in reports.

● Filter members to create more detailed reports.

● Analyze data in reports by sorting, ranking, and filtering data.

Topics in this section:

● "Query Designer Window" on page 92

● "Using Operators with Non-Numeric Attributes" on page 93

Query Designer Window

Query Designer contains three panels:

- **Navigation**—Left panel. Provides access to the various features in Query Designer. Use the navigation panel to create and apply queries, to display all used and unused dimensions in the current query, and to access the properties panels.

- **Hint**—Top right panel. Provides a short description of the function of the current display in the properties panel. The help text in the hint panel changes depending on the selection in the navigation panel.

- **Properties**—Bottom right panel. Displays various panels, such as query information, layout, member select, member filter, data sort, data filter, data restriction, messages and confirmation, and help. By selecting the item in the navigation panel, you access different functions in the properties panel.
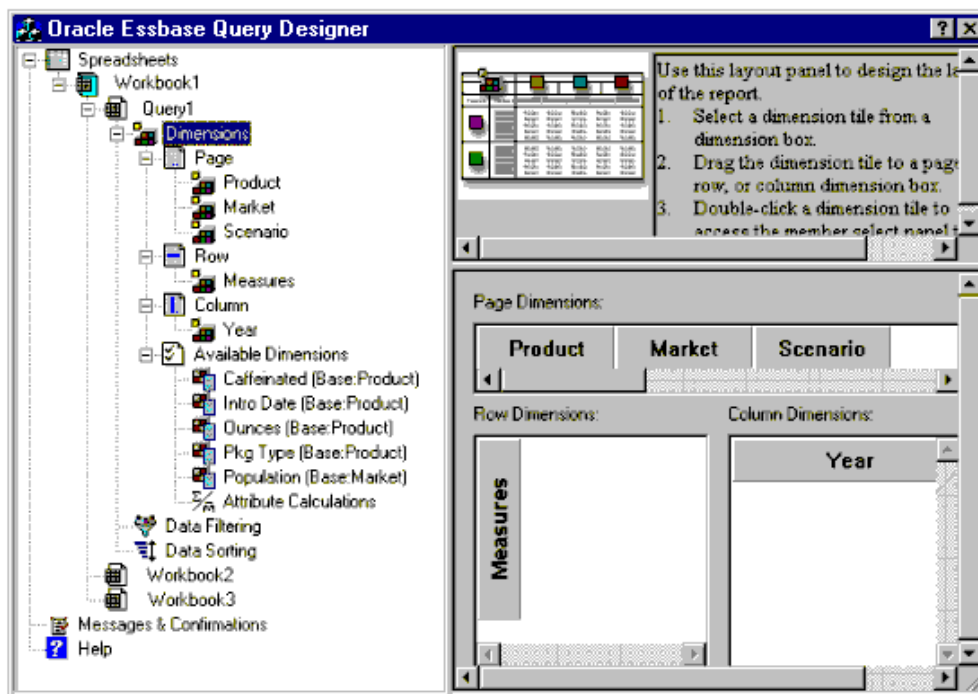
Accessing Help

To access online help for Query Designer, select Help in the navigation panel.

Using Operators with Non-Numeric Attributes

When comparing numeric attributes, one can easily predict what you get when you specify a greater than (>) comparison between two numeric attributes. For example, Ounces is a numeric attribute consisting of various sizes of product, such as 12 ounces and 16 ounces. When you compare the two ounces, obviously 16 ounces is greater than 12 ounces. When you apply the same greater than comparison to text or Boolean attributes, however, the result is not so obvious. In Query Designer, the same operator produces different results depending on attribute types. All examples below use attribute dimensions in the Sample Basic database.

Text Attributes

In this example, Pkg Type is a text attribute in Product, with members Bottle and Can. When you filter Products less than Can, the result is Caffeine Free Cola because its Bottle attribute contains an ASCII character that is less than the ASCII character for Can.

```
□ ⬛ Product
   □ 🗐 Colas
      🔲 Pkg Type < Can
```
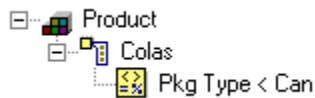
Sample result:

	A	B	C	D	E
1		Market	Scenario	Measures	Year
2	Caffeine Free Cola	1983			
3					
4					

Boolean Attributes

In this example, Caffeinated is a Boolean attribute in Product, with members Caffeinated_True and Caffeinated_False. For Boolean attributes, True equals to 1 and False equals to 0. The query below returns all Colas that are caffeinated.

```
□ ⬛ Product
   □ 🗐 Colas
      🔲 Caffeinated is Caffeinated_True
```
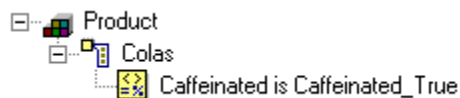
Sample result:

	A	B	C	D	E
1		Market	Scenario	Measures	Year
2	Cola	22777			
3	Diet Cola	5708			
4					

Date Attributes

In this example, Intro Date is a date attribute in Product, with members Intro_Date_03-25-1996, Intro_Date_04-01-1996, and so on. For date attributes, earlier dates are considered less than later dates. The query below returns all products introduced before July 26, 1996.

Sample result:

	A	B	C	D	E
1		Market	Scenario	Measures	Year
2	Cola	22777			
3	Diet Cola	5708			
4	Caffeine Free Cola	1983			
5	Old Fashioned	7201			
6	Dark Cream	12195			
7	Vanilla Cream	2511			
8	Diet Cream	11093			
9					

Related Topics

Applying Multiple Member Filters

When specifying member filters for member selection, you can apply multiple filters simultaneously. You can also specify groupings of filters. Rather than using parentheses to represent filter groupings, Query Designer uses an indentation style.

In general:

- An AND condition is represented by an indented level in the navigation panel.
- An OR condition is represented by groupings at the same level in the navigation panel.

These examples show groupings and the results that are produced:

Example 1
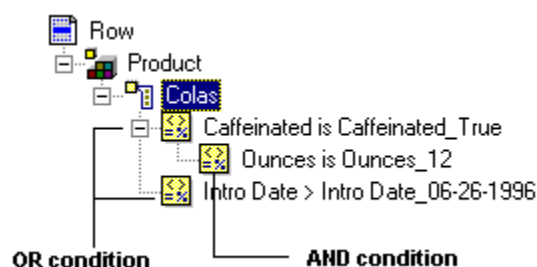
In this example, Essbase filters members of the Product dimension with the Caffeinated_True and Ounces_12 attributes—that is, all products that are caffeinated and come in 12 ounce sizes. The results of this filter are compared to the next criteria, which are all products having an

introduction date later than June 26, 1996. When you preview the results, you get: Cola and Diet Cola.

Example 2
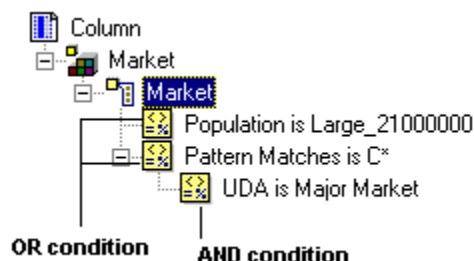
In this example, Essbase filters members of the Market dimension with the Large_21000000 attribute or begin with the letter "C" and with a UDA of Major Market—that is, all Markets with a population of 21,000,000 or beginning with the letter "C," and is a major market. When you preview the results, you get: New York, California, Texas, Colorado, and Central.

Related Topics

"Applying Member Filtering Rules" on page 104

Applying Multiple Data Filters

You can apply multiple filters for data in Query Designer. Filtering data enables you to isolate the data to be included in the report. AND and OR data filters are represented at the same level in the navigation panel. In addition, the word AND or OR precedes the data filter restriction. Grouping of data filter restrictions is not supported in this product. Following are some data restriction examples and their expected results:

This sample report displays the results of the data restriction. Notice that column B displays Margin % without #Missing values, and column L displays Profit, where the data is less than 2000 and greater than 3000.

	A	B	C	E	G	I	J	K	L
1					Actual				
2		Margin %	Profit %	Sales	Margin	Payroll	Misc	Total Expe	Profit
3	100-20	48.74912	21.08879	5676	2767	684	18	1570	1197
4	100	53.46437	29.31818	16280	8704	1584	42	3931	4773
5	200	59.23301	27.78535	22008	13036	3375	63	6921	6115
6	300-30	56.74044	23.66929	5467	3102	996	29	1808	1294
7	300	56.9836	18.71317	12558	7156	2259	54	4806	2350
8	100-20	48.74912	21.08879	5676	2767	684	18	1570	1197
9	300-30	56.74044	23.66929	5467	3102	996	29	1808	1294
10	Diet	55.35982	26.30114	18676	10339	2775	67	5427	4912
11									
12									
13									

Related Topics

Managing Queries

-
-
-
-
-
-
-
-
-

Creating Queries

➤ To define a query for each worksheet:

1 Connect to an Essbase database.

2 Select **Essbase**, and then **Query Designer**.

> Note: Renaming workbooks or worksheets, closing workbooks, or opening Excel windows
> at this point can cause synchronization problems between Query Designer and
> Essbase. If you must rename a workbook or worksheet, or open an Excel window,

close Query Designer, disconnect from Essbase, perform the necessary Excel operation, connect to Essbase again, and perform the steps for creating a query.

3 In the navigation panel of **Query Designer**, select the active worksheet; for example, Query1.

4 Right-click and select **New**, and then **Query**.

Essbase populates the layout panel with a default layout for a selected database.

Next, you must define the layout for the report.

Related Topics

Opening Queries

➤ To open saved queries:

1 Connect to an Essbase database.

2 Select **Essbase**, and then **Query Designer**.

> **Note:** Renaming workbooks or worksheets, closing workbooks, or opening Excel windows at this point can cause synchronization problems between Query Designer and Essbase. If you must rename a workbook or worksheet, or open an Excel window, close Query Designer, disconnect from Essbase, perform the necessary Excel operation, connect to Essbase again, and perform the steps for opening a query.

3 In the navigation panel, select the active worksheet; for example, Query1.

4 Right-click and select **Open Query**.

5 In **Query Designer Open Query**, specify the location of the query file by selecting **Server** or **Client**.

6 If you select:

- Server:

a. Specify the application and database of the query.

b. Select from the list of saved queries in **Query Objects** or enter the name in **Query Name**.

- Client:

a. To locate the query, click **File System**.

b. Select the query.

   c. Click **OK**.

7 **Click OK.**

   Note: Query Designer can open EQD and Retrieval Wizard WIZ files, but does not support
            WIZ files containing multiple filters.

Related Topics

Applying Queries

➤ To display the results of a query in one worksheet:

1 **Select a node in the navigation panel.**

2 **To apply a query to the active worksheet, right-click and select Apply Query.**

   You can view the results of the query in the worksheet.

   On the Display page of the Essbase Options dialog box, if you select Use Styles and Use Sheet
   Options with Query Designer, the styles you selected for dimension members are applied
   to the initial query results. If you do not select Use Sheet Options with Query Designer, even
   if you selected Use Styles, they are not applied to the initial query results. To apply styles,
   select Essbase, and then Retrieve.

   Note: The XLS file that results from applying the query can be saved for possible use as an
            Essbase data load data file.

Related Topics

Applying All Queries

➤ To display the results of all queries for each worksheet:

1 Select a workbook level node in the navigation panel.

2 To apply queries to all worksheets, right-click and select **Apply All Queries**.

   You can view the results of each query in the worksheet.

Related Topics

Saving Queries

➤ To save a query definition for later use:

1 Select a node in the navigation panel.

2 Right-click and select Save Query.

3 In **Save As Query**, select **Server** or **Client** as the location to save the query.

4 If you selected:

   ● Server:

   a. Specify the application and database of the query.

   b. Specify the query name in **Query Name**.

   ● Client:

   a. To locate the directory where you want to save the query, click **File System**.

   b. Specify a name for the query.

   c. Click **OK**.

5 Click **OK**.

Note: Query Designer saves the queries as EQD files and also creates Report Writer files, REP, which you can use in the report scripts.

Related Topics

Closing Queries

Related Topics

➤ To close a query from the navigation panel:

1 Select a node in the navigation panel.

2 Right-click and select **Close Query**.

Related Topics

Deleting Queries

You can delete queries only from the location where you saved the queries. You cannot delete queries using Query Designer.

Creating Workbooks

➤ To create a workbook from within Query Designer:

1 Select one of the nodes in the navigation panel.

2 Right-click and select **New**, and then **Workbook**.

A workbook is created in the worksheet and is also displayed in the navigation panel.

Notes:

● This task performs the same function as using the worksheet menu bar to create a workbook.

- Renaming workbooks or worksheets, closing workbooks, or opening Excel windows at this point can cause synchronization problems between Query Designer and Essbase. If you must rename a workbook or worksheet, or open an Excel window, close Query Designer, disconnect from Essbase, perform the necessary Excel operation, connect to Essbase again, and perform the steps for creating a workbook.

Related Topics

Creating Worksheets

➤ To create a worksheet from within Query Designer:

1 Select a node in the navigation panel.

2 Right-click and select **New**, and then **Worksheet**.

   A worksheet is created in the worksheet and is also displayed in the navigation panel. You can connect to the same database or to another one.

Notes:

- This feature serves the same function as using the worksheet menu bar to create a worksheet.

- Renaming workbooks or worksheets, closing workbooks, or opening Excel windows at this point can cause synchronization problems between Query Designer and Essbase. If you must rename a workbook or worksheet, or open an Excel window, close Query Designer, disconnect from Essbase, perform the necessary Excel operation, connect to Essbase again, and perform the steps for creating a worksheet.

> **Caution!** Manipulation of worksheets in VBA, such as naming worksheets or moving worksheets, may not work when Query Designer is running.

Related Topics

Retrieving Data

➤ To retrieve data into the worksheet in Query Designer:

1 Select one of the worksheets in the navigation panel; for example, Query1.

2 Right-click and select **Retrieve**.

   The worksheet displays the results of the data retrieval.

Notes:

- To retrieve data in all worksheets, select the worksheet node in the navigation panel. Right-click and select Retrieve All Worksheets.

- This task performs the same function as selecting the Retrieve command in Spreadsheet Add-in.

Defining Report Layout

➤ To specify how each dimension in the database should be represented in the spreadsheet report:

1 Select a dimension tile in the layout panel.

2 Drag the dimension to the desired location in the layout panel.

The Page Dimensions box specifies that dimensions are to be placed across the top of the spreadsheet.

The Column Dimensions box specifies that dimensions are to be placed in the columns of the spreadsheet.

The Row Dimensions box specifies that dimensions are to be placed in the rows of the spreadsheet.

Notes:

- You can also drag dimensions from one location to another within the navigation panel or between the navigation panel and the layout panel. Alternatively, you can select a dimension in the navigation panel, right-click, and select Move to.

- You must specify at least one dimension for a row dimension and one for a column dimension.

- If the database outline contains attribute dimensions, they are usually displayed under the Available Dimension list in the navigation panel. You can select dimensions from the Available Dimensions list and specify their layout in the report.

Next, you must specify the members for the report.

Defining Query Members

- "Selecting Query Members" on page 103
- "Applying Member Filtering Rules" on page 104
- "Searching for Members" on page 105
- "Specifying Latest Period of Time Dimensions" on page 106
- "Previewing Member Filter Results" on page 107
- "Setting the Maximum Number of Members to Preview" on page 108

Selecting Query Members

➤ To select members from the dimension to use in a query:

1 Select a dimension under **Page**, **Row**, or **Column** nodes in the navigation panel to view the member select panel.

2 In **Members**, select a member.

3 Right-click and select **Add to Selection Rules**.

Alternatively, you can double-click to add a member to the selection.

The member is added to Selection Rules and is displayed under the dimension in the navigation panel.

4 **Optional:** For row and column dimensions only, you can apply additional selection rules by completing these tasks:

a. In **Selection Rules**, select the member, right-click, and choose **Select**.

b. Select one option:

- **Member** selects just the member.
- **Children** selects all members one level below the selected member.
- **Children and Member** selects all members one level below the selected member, including the member.
- **Descendants** selects all members in every level below the selected member.
- **Descendants and Member** selects all members in every level below the selected member, including the member.

Next, you can apply additional filters to the member selection to locate members that meet criteria.

Related Topics

"Applying Member Filtering Rules" on page 104

"Deleting Member Selection Rules" on page 108

Applying Member Filtering Rules

This task assumes that you followed the steps in"Defining Report Layout" on page 102 and "Selecting Query Members" on page 103.

➤ To apply filtering rules to selected members, such as selection by attributes, generation name, level name, pattern matching, and UDAs:

1   Select the member in **Selection Rules**.

2   To view the member filter panel, right-click and select **New Member Filter**.

3   Select from the available choices in **Method**:

   ● **Generation Name** enables you to select members based on generation name.

   ● **Level Name** enables you to select members based on level name.

   ● **Pattern Matches** enables you to select members based on matching a text string. Pattern matching supports the single-character wildcard symbol, ?, and trailing asterisk wildcard symbol, *. Examples of valid wildcard strings are J?n and 100*. Invalid wildcard strings are *-10 and *10*.

   ● **UDA** enables you to select members by user-defined attribute.

     If the database outline also includes attributes, these are displayed in Method before Generation Name. See "Using Attributes to Select Base Dimension Members" on page 112.

4   Select a comparison operator from **Operator**:

   ● **is** includes members that meet the criteria set in **Value**. For example, Generation Name is Gen2, Product includes 100, 200, 300, 400, and Diet.

   ● **is not** excludes members that meet the criteria set in **Value**. For example, Generation Name is not Gen2, Product excludes 100, 200, 300, 400, and Diet.

5   Select from the available values in **Value**.

6   **Optional:** If you want to create groupings of member filters, select the same dimension in the navigation panel to return to the member selection panel.

7   In **Selection Rules**, select the member filter criteria that you previously defined.

8 Right-click and select one of these conditions:

- **New Member Filter (AND)**—Selection must meet all criteria.
- **New Member Filter (OR)**—Selection must meet at least one of the criteria.

  Selecting one of these menu items returns you to the member filter panel.

9 Repeat step 3 through step 8 for each set of criteria.

As you create each member filter, notice that the navigation panel displays the criteria that you defined for the member.

Next, you can preview the results of the member filter or apply the query.

Related Topics

Searching for Members

➤ To search for members, within a selected dimension, that match a pattern string in Query Designer:

1 In the navigation panel, select a dimension.

The dimension and its members are displayed in the member select panel.

2 In the member select panel, select a member.

3 Right-click and select **Find** from the shortcut menu.

4 In **Find Members**, enter the text string to be searched (a member name or pattern).

Trailing asterisks and wildcard strings are acceptable search strings. Examples of valid text strings are: Ja*, M?n, and M??n. Examples of invalid text strings are: *-10 and J*n.

5 To locate the first member within the selected dimension that matches the text string, click **Find**.

6   Click **Find Next** (if available) to search for the next occurrence of the text string. Continue to click **Find Next** until all matching text strings within the selected dimension are found.

If Find Next is not available, all occurrences of the text string are found.

7   **Optional:** To add the member to the selection, click **Add Rule**.

8   Repeat step 1 through step 7 to search for members within another dimension.

9   Click **Close**.

Next, you can apply additional filters to the member selection to locate members that meet criteria.

Related Topics

"Applying Member Filtering Rules" on page 104

"Deleting Member Selection Rules" on page 108

"Displaying Aliases" on page 110

"Selecting Attribute Members" on page 113

"Selecting Query Members" on page 103

"Setting the Maximum Number of Members to Preview" on page 108

"Specifying Latest Period of Time Dimensions" on page 106

"Suppressing Shared Members" on page 111

"Using Attributes to Select Base Dimension Members" on page 112

"Viewing Member Information" on page 110

Specifying Latest Period of Time Dimensions

➤   To define the to-date value for the Dynamic Time Series:

1   Select the **Time** dimension in the navigation panel; for example, Year.

2   In the member select panel, select a member.

3   Right-click and select **View By**, and then **Dynamic Time Series**.

4   Select a Dynamic Time Series; for example, Q-T-D.

5   Right-click and select **Add to Selection Rules**.

6   In **Selection Rules**, select the Dynamic Time Series, right-click and select **Specify Latest**.

7   From **Select Latest Period**, select the member for the to-date calculation to be based.

8   Click **OK**.

Next, you can define filters to rank or sort the data. Or, if you are finished defining the query, you can apply the query now.

Related Topics

Previewing Member Filter Results

This task assumes that you followed the steps in first.

➤ Before applying the query, to view the results of member filtering:

1 In **Selection Rules**, right-click and select **Preview**.

Member Selection Preview shows the members that meet the criteria for the query. If nothing matches the criteria, the preview returns the top-level dimension.

2 Click **Close**.

You can change the maximum number of members that appear in Member Selection Preview.

Next, you can define filters to rank or sort the data. Or, if you are finished defining the query, you can apply the query now.

Related Topics

Setting the Maximum Number of Members to Preview

The default number of members that is displayed in the preview is 1000.

➤ To change the maximum number of members displayed in Member Selection Preview:

1   In Microsoft Windows, select **Start,** then **Run.**

2   In **Open**, enter `regedit`.

3   Click **OK.**

4   In **Registry Editor** window, select **HKEY_CURRENT_USER** and navigate to `Software/Essbase/QueryDesigner/Preview`.

5   While in `Software/Essbase/QueryDesigner/Preview`, select **Edit**, then **New**, and then **DWORD Value.**

6   Specify a name for this registry; for example, enter `MaximumMembers`.

7   Double-click the registry entry, and in **Edit DWORD Value**, specify a value.

8   In **Base**, select **Hexadecimal** or **Decimal.**

9   In **Value data**, specify the maximum number of preview members to display.

10 Click **OK.**

11 Select **Registry**, and then **Exit.**

> **Note:**   Increasing the number of members to display may affect the performance of the retrieval.

Related Topics

Deleting Member Selection Rules

➤ To delete rules that you defined for a member:

1   In the member select panel, select a member in **Selection Rules.**

2   Right-click and select **Delete Selection Rules.**

If you want to remove all rules, select Delete All Rules.

Related Topics

Viewing Members by Member Name

➤ To view members using their member names instead of their aliases, in the member select panel, right-click and select **View by**, and then **Name.**

Related Topics

Viewing Members by Generation Name

➤ To view members using their generation names, in the member select panel, right-click and select **View by**, and then **Generation.**

Related Topics

Viewing Members by Level Name

➤ To view members using their level names, in the member select panel, right-click and select **View by**, and then **Level.**

Related Topics

Viewing Members by Dynamic Time Series

➤ To view members of a Time dimension using Dynamic Time Series names, in the member select panel, right-click and select **View by**, and then **Dynamic Time Series**.

Related Topics

Viewing Member Information

➤ To view information such as aliases, attributes, comments, formulas, and UDAs for the member, in the member select panel, right-click and select **Member Information**.

Related Topics

Displaying Aliases

➤ To view members using their aliases:

1 Select a member in the member select panel.

2 Right-click and select **Aliases**.

3 Select one option:

● **None** displays no aliases.

- **Default** displays default aliases.

  A third choice may be available depending on the presence of other alias table names in the outline.

  Note: Aliases are defined for members in the database outline. Not every member is associated with an alias.

Related Topics

Suppressing Shared Members

➤ To prevent members tagged as shared from being displayed multiple times in the spreadsheet report:

1 In the member select panel, select a member.

2 Right-click and select **View by**, and then **Generation Name** or **View by**, and then **Level Name**.

3 Select a generation or level name.

4 Right-click and select **Suppress Shared Members**.

Related Topics

Using Attribute Members

Using Attributes to Select Base Dimension Members

This task assumes that you followed the steps in "Defining Report Layout" on page 102.

➤ To display the base dimension members associated with an attribute in the spreadsheet report:

1   Under the **Row** or **Column** dimension in the navigation panel, select a dimension with which attributes are associated, for example, the Product dimension, to display the member select panel.

2   In **Members**, select a member.

3   Right-click and select **Add to Selection Rules**. Alternatively, you can double-click a member or drag the member to add it to the selection.

4   Select a member in **Selection Rules**.

5   To display the member filter panel, right-click and select **New Member Filter**.

6   Select an attribute in **Method**.

7   Select a comparison operator in **Operator**.

The choices in the Operator list box change depending on the type of attribute on which you want to filter. Attributes can be one of four types: text, numeric, Boolean, and date.

The choices for Boolean attribute types are is and is not.

- **is** includes members that meet the criteria set in **Value**. For example, Caffeinated is Caffeinated_True includes all members in the Product base dimension that are caffeinated.

- **is not** excludes members that meet the criteria set in **Value**. For example, Caffeinated is not Caffeinated_True excludes all members in the Product base dimension that are caffeinated.

    The choices for text, numeric and date attribute types are =, !=, <, >, <=, and >=.

- = returns all members that equals the value. For example, Intro Date = 03_25_1996 includes all products with introduction dates of March 25, 1996.

- != returns all members that do not equal the value. For example, Intro Date != 03_25_96 includes only products with introduction dates other than March 25, 1996.

- < returns all members less than the value. For example, Intro Date < 03_25_1996 includes all products introduced before, but not including, March 25, 1996.

- > returns all members greater than the value. For example, Intro Date > 03_25_1996 includes all products introduced after, but not including, March 25, 1996.

- <= returns all members less than and equal to the value. For example, Intro Date <= 03_25_1996 includes all products introduced before and including March 25, 1996.

- >= returns all members greater than and equal to the value. For example, Intro Date >= 03_25_1996 includes all products introduced after and including March 25, 1996.

8 Select from the available values in **Value**.

Next, you can preview the results, or if you are done defining the query, you can apply the query.

Related Topics

Selecting Attribute Members

This task assumes that you followed the steps in .

➤ To display attribute dimension members in the spreadsheet report:

1 Select an attribute dimension, for example, Caffeinated, under **Page**, **Row**, or **Column** dimension in the navigation panel to view the member select panel.

2 In **Members**, select a member, right-click and select Add to Selection Rules. Alternatively, you can double-click a member or drag the member to add it to the selection.

The member is added to the Selection Rules list box and is displayed under the dimension in the navigation panel. If the member is a row or column dimension, go on to the next step; otherwise, stop here because you can define only one member per page dimension.

3 **Optional:** To apply member filtering, select the attribute in **Selection Rules**.

You cannot apply member filtering to page dimensions.

4   To display the member filter panel, right-click and select **New Member Filter**.

5   In **Method**, select one option:

   ● **Pattern Matches** enables you to select members based on matching a text string. Pattern matching supports the single character wildcard symbol, ?, and trailing asterisk wildcard symbol, *. Examples of valid wildcard strings are J?n and 100*. Invalid wildcard strings are *-10 and *10*.

   ● **Generation Name** enables you to select members based on generation name.

   ● **Level Name** enables you to select members based on level name.

6   Select a comparison operator from **Operator**.

7   Select a value in **Value**. If you are doing a pattern match, enter the string to match.

Next, you can preview the results or apply the query now.

Related Topics

"Applying Member Filtering Rules" on page 104

"Applying Multiple Member Filters" on page 94

"Deleting Member Selection Rules" on page 108

"Displaying Aliases" on page 110

"Searching for Members" on page 105

"Selecting Query Members" on page 103

"Setting the Maximum Number of Members to Preview" on page 108

"Specifying Latest Period of Time Dimensions" on page 106

"Suppressing Shared Members" on page 111

"Using Attributes to Select Base Dimension Members" on page 112

"Using Operators with Non-Numeric Attributes" on page 93

"Viewing Member Information" on page 110

Creating Data Filters

● "Filtering by Ranking Data Values" on page 115

● "Filtering by Comparing Data Values" on page 115

Filtering by Ranking Data Values

➤ To rank data based on top or bottom criteria or both:

1   To display the data filter panel, in the navigation panel, select **Data Filtering**.

2   In the data filter panel, select a **Rank** option:

- To retrieve the top *n* rows of a dimension, select **Top** and specify the number of rows to be retrieved.

    The default is the top 25 rows.

- To retrieve the bottom *n* rows of a dimension, select **Bottom** and specify the number of rows to be retrieved.

3   From **Dimension being ranked**, select a row dimension to which ranking should be applied.

4   From **Column being used for ranking**, select a column dimension member combination.

The member combinations listed here are determined by the members that you selected for the column dimensions. The data values for the specified column dimension members are used to determine the ranking for the members in the row dimension.

Next, you can sort the data, or apply the query now.

Related Topics

"Applying Multiple Data Filters" on page 95

"Filtering by Comparing Data Values" on page 115

"Creating Data Sorts" on page 116

Filtering by Comparing Data Values

➤ To filter data by restricting the data returned:

1   To display the data filter panel, in the navigation panel, select **Data Filtering**.

2   Double-click in **Data Restrictions**.

Data restrictions apply standard data comparison operations (such as greater than, less than, and equal to) to data values.

If you define multiple criteria for a column, you can use the OR and AND operators to link the criteria.

3   From **Data values**, select a value.

4   Select one option:

- **a value of** enables you to compare the data to a data value, including a negative data value.

- **the data values in** enables you to compare data from other column dimensions.

- **a #MISSING value** enables you to compare data to #MISSING data value.

5   From **Column used for filter**, select a column dimension member combination.

The member combinations listed here are determined by the members that you selected for the column dimensions. The data values for the specified column dimension members are used to compare data.

6   **Optional:** If you want to apply multiple data filters, repeat step 2 through step 5, and select **And** or **Or**.

The And option specifies that data must meet all criteria. The Or option specifies that the data must meet at least one of the criteria.

Next, you can sort the data, or apply the query now.

Related Topics

Deleting Data Restrictions

➤   To delete a data restriction, select the data restriction in the query outline or Data Restriction box, right-click, and then select **Delete Data Restriction**.

➤   To delete all data restrictions, select the **Data Filtering** icon in the navigation panel, right-click, and then select **Delete All Data Restrictions**.

Alternatively, you can select a data restriction in the Data Restriction box, right-click, and then select Delete All Data Restrictions.

Creating Data Sorts

➤   To sort data in ascending or descending order in a spreadsheet report:

1   In the navigation panel, select **Data Sorting**.

The data sorting settings are displayed in the properties panel. You specify data sorting criteria to affect the order in which the selected rows are retrieved in the data sorting panel.

2   From **Dimension being sorted**, select a row dimension.

The members in the row dimension are sorted according to the data values in a column. For example, you can sort members of the Product dimension based on their January sales data values.

3   In the data sorting panel, double-click **(double-click to create a new sort rule)**.

4   From **Ordering**, select **Ascending** (to sort data values from lowest to highest) or **Descending** (to sort data values from highest to lowest).

5   From **Column used for sort**, select a member combination.

The member combinations listed here are determined by the members that you selected for the column dimensions. The data values for the specified column dimension members are used to determine the sort order for the members in the row dimension.

6   Repeat step 2 through step 5 for each data sort.

Next, you can rank the data, or apply the query now.

Note: The values that you are ranking and sorting must be the same. For example, you cannot specify Product as Dimension being ranked and Market as Dimension being sorted. If you specify different values, Query Designer automatically changes both values to the last specified value.

Related Topics

"Applying Multiple Data Filters" on page 95

"Filtering by Ranking Data Values" on page 115

"Filtering by Comparing Data Values" on page 115

Connecting to Multiple Databases from Query Designer

You can connect to several databases and create queries on each database from Query Designer.

➤   To connect to multiple databases from Query Designer:

1   Log on to Essbase and connect to the server to access.

2   Select **Essbase**, and then **Query Designer**.

3   Select [Book1]Sheet1, right-click, and select **Connect**.

The Essbase System Login dialog box is displayed.

Note: The book may be a number other than 1. For example, it may be [Book5], if four worksheets are open.

4   Enter your password, and then click **OK**.

5   Select **Sample Basic**, and then click **OK**.

6   Select [Book1]Sheet2 (or Sheet3), right-click, and select **Connect**.

The Essbase System Login dialog box is displayed.

7   Enter your password, and then click **OK**.

8 Select **Samppart Company**, and then click **OK**.

> **Note:** You are restricted to one connection per worksheet. The connection information is displayed in the query information panel of the Query Designer only when you open or create a query.

9 To create a query based on Sample Basic, select **[Book1]Sheet1**, then right click and select **New**, and then **Query** .

10 To create a query based on Samppart Company, select **[Book1]Sheet2**, then right-click and select **New**, and then **Query**.

11 To open a query, right click and select **Open Query**.

You are now ready to create or open queries.

Enabling and Disabling Messages

Query Designer displays messages and confirmations about certain actions, such as moves and deletions, in the messages and confirmations panel.

- "Enabling Warning Messages" on page 118
- "Disabling Warning Messages" on page 118

Enabling Warning Messages

➤ To enable warning messages in Query Designer:

1 To display the messages and confirmation panel, in the navigation panel, select **Messages and Confirmation**.

2 Select the check box next to the message to activate message notification.

Related Topics

"Disabling Warning Messages" on page 118

Disabling Warning Messages

➤ To disable warning messages in Query Designer:

1 To display the messages and confirmation panel, in the navigation panel, select **Messages and Confirmation**.

2 Clear the check box next to the message to turn off message notification.

Related Topics

"Enabling Warning Messages" on page 118

Using Shortcut Menus

Use shortcut menus to access commands in Query Designer:

-
-
-

For example, select a node in the navigation panel, and click the right mouse button to display a shortcut menu. The menu items that are available differ depending on the selection.

Note: Users can configure mouse buttons in whatever order they choose. In this help system, the assumption is that the left mouse button is the primary button, and the right mouse button is the secondary button. Modify the procedures to access the menus according to the mouse configuration.

Data Filter Panel Shortcut Menus

You can access the commands shown in Table 4 from the shortcut menu in the data filter panel.

➤ To access this shortcut menu, place the cursor inside **Data Restrictions**, and right-click.

Table 3   Data Filter Panel Shortcut Menu Items

Menu Item	Description
New Data Restriction	Displays the data restriction panel so that you can specify additional data filtering.
Delete Data Restriction	Removes the selected data filter.
Delete All Data Restrictions	Removes all data filters.

Member Select Panel Shortcut Menus

You can access shortcut menus in each of the two list boxes in the member select panel.

➤ To access these shortcut menus, place the cursor in one of the two list boxes, select a member, and right-click.

The menu items that are available differ depending on the selection.

Table 4 lists menu items (in alphabetical order) that you can access in the Members list box:

Table 4   Member Select Panel Shortcut Menu Items

Menu Item	Description
Add to Selection Rules	Adds the selected member to the selection rules list.

Menu Item	Description
Aliases, Alias Table Name	Displays the members using an alias table name defined in the outline. This menu name changes depending on the alias table name in the database outline.
Aliases, Default	Displays the members using the default alias names.
Alias None	Displays the members without alias names.
Expand to Children	Expands the list to the dimension children.
Expand to Descendants	Expands the list to the dimension descendants.
Find	Enables you to do pattern match searches for members in the selected dimension.
Member Information	Displays information about the member. Information includes level name, generation name, formulas, UDAs, and attributes associated with the member.
Replace Selection Rule	Replaces the member selection with the current one.
Suppress Shared Members	Prevents shared members from appearing multiple times in the spreadsheet report.
View by, Dynamic Time Series	Displays the time dimension members by their Dynamic Time Series names.
View by, Generation	Displays the dimension members by their generation names.
View by, Level	Displays the dimension members by their level names.
View by, Name	Displays the dimension members by their member names.
Delete All Rules	Removes all member selection rules.
Delete Member Filter	Removes the selected filter that you defined for the member.
Delete Selection Rule	Removes the specified member selection rule.
New Member Filter	Displays the member filter panel to define filters for the member.
New Member Filter (AND)	Applies an AND condition to selected member filter.
New Member Filter (OR)	Applies an OR condition to selected member filter.
Preview	Displays the Member Preview dialog box to display the results of the member filter.
Select, Children	Enables you to select only the children of the member.
Select, Children and Member	Enables you to select the member and its children.
Select, Descendants	Enables you to select only the descendants of the member.
Select, Descendants and Member	Enables you to select the member and its descendants.
Specify Latest	Enables you to specify the latest period to perform the to-date calculation.
Select, Member	Enables you to select only the member.

Table 5 lists the menu items (in alphabetical order) that you can access in the Selection Rules list box:

Table 5 Select Rules List Box Shortcut Menu Items

Menu Item	Description
Delete All Rules	Removes all member selection rules.
Delete Member Filter	Removes the selected filter that you defined for the member.
Delete Selection Rule	Removes the specified member selection rule.
New Member Filter	Displays the member filter panel to define filters for the member.
New Member Filter (AND)	Applies an AND condition to selected member filter.
New Member Filter (OR)	Applies an OR condition to selected member filter.
Preview	Displays the Member Preview dialog box to display the results of the member filter.
Select, Children	Enables you to select only the children of the member.
Select , Children and Member	Enables you to select the member and its children.
Select, Descendants	Enables you to select only the descendants of the member.
Select, Descendants and Member	Enables you to select the member and its descendants.
Specify Latest	Enables you to specify the latest period to perform the to-date calculation.
Select, Member	Enables you to select only the member.

Navigation Panel Shortcut Menus

You can access several shortcut menus in the navigation panel.

➤ To access a shortcut menu, select a node in the navigation panel, and right-click.

The menu items that are available differ depending on the selection.

Table 6 lists the menu items (in alphabetical order) that you can access in the navigation panel:

Table 6 Navigation Panel Shortcut Menu Items

Menu Item	Description
Apply All Queries	Applies queries defined in all worksheets.
Apply Query	Applies the query for the active worksheet.
Close Query	Exits the query.
Connect	Displays the Essbase System Login dialog box to connect to an Essbase database.
Delete All Sorting Rules	Removes all rules that you defined for sorting data.
Delete Sorting Rule	Removes the selected rule that you defined for sorting data.

Menu Item	Description
Demote Member Filter	Applies an AND condition to selected member filter.
Disconnect	Disconnects you from the currently connected database.
Move Data Restriction Down	Moves the data restriction to a lower priority. Query Designer analyzes filters from top to bottom.
Move Data Restriction Up	Moves the data restriction to a higher priority. Query Designer analyzes filters from top to bottom.
Move Member Filter Down	Moves the member filter to a lower priority. Query Designer analyzes filters from top to bottom.
Move Member Filter Up	Moves the member filter to a higher priority. Query Designer analyzes filters from top to bottom.
Move Selection Rule Down	Moves the member selection down one position to change the order in which the members appear in the spreadsheet report.
Move Selection Rule Up	Moves the member selection up one position to change the order in which the members appear in the spreadsheet report.
Move Sorting Rule Down	Moves the sorting rule down one position to change the order in which sorts are analyzed.
Move Sorting Rule Up	Moves the sorting rule up one position to change the order in which sorts are analyzed.
Move to: Available Dimensions	Moves the dimension to the list of available dimensions, which are not used to define the spreadsheet report.
Move to: Column	Defines the dimension as a column dimension. These dimensions appear in the column of the spreadsheet.
Move to: Page	Defines the dimension as a page dimension. The dimensions appear across the top of the spreadsheet.
Move to: Row	Defines the dimension as a row dimension. These dimensions appear in the row of the spreadsheet.
New: Data Restriction	Displays the data restriction panel so that you can specify additional data filtering.
New: Member Filter	Displays the member filter panel to define filters for the member.
New: Query	Creates the starting point for queries. Query Designer creates a default layout for the spreadsheet report that you can modify.
New: Sorting Rule	Displays the data sort panel so that you can create a sort rule.
New Workbook	Creates a workbook in the spreadsheet. The functionality is identical to creating a workbook from the spreadsheet menu.
New Worksheet	Creates a worksheet in the spreadsheet. The functionality is identical to creating a worksheet from the spreadsheet menu.
Open Query	Displays the Open Query dialog box to open a saved query.
Promote Member Filter	Applies an OR condition to the selected member filter.
Retrieve	Retrieves data for the active query into the spreadsheet. This command serves the same function as selecting the Retrieve command from Spreadsheet Add-in.
Retrieve All Worksheets	Retrieves data for each query defined in a worksheet.

Menu Item	Description
Save Query	Displays the Save As Query dialog box to save the query.
Save Query As	Displays the Save As Query dialog box to save the query as another name.
Select Active Sheet	Selects the active worksheet in the spreadsheet.

Selecting Members

Selecting Members to Add to Worksheets

A database may contain hundreds or thousands of members, making it difficult to remember each member name if you want to select many members for the report. The Essbase Member Selection dialog box enables you to easily select members, specify criteria to find members, and define their layout in the spreadsheet. Member selection is an important method of creating a report for the data you want to retrieve.

➤ To select members to add to the worksheet:

1   Select **Essbase**, and then **Member Selection**.

2   In **Essbase Member Selection**, select the dimension whose members you want to select from **Dimension**.

    A list of members for the chosen dimension is displayed in the Members list box. Members are listed by member name, by default.

3 To change the view method, select an option in **View Method**.

4 To **search** for a member, click **Find**.

5 Select members from **Members**, and then click **Add**.

The selected members appear in the Rules list box.

> **Note:** If duplicate members are selected, hover over the duplicate member names to view the qualified member name.

6 To apply selection rules for a member, select the member name in **Rules**, and right-click to display a shortcut menu. Select an option:

- **All Children** selects all children of the selected member.

- **All Children and Member** selects all children of the selected member, including the member.

- **All Descendants** selects all descendants of the selected member.

- **All Descendants and Member** selects all descendants of the selected member, including the member.

- **Subset** enables you to further define the member criteria. You can define a maximum of 50 conditions in the Subset Dialog box.

  If the selected item in the Rules list box is a generation or level name, Subset is the only selection in the shortcut menu. If the selected item is a Dynamic Time Series member, Specify Latest is the only selection in the shortcut menu.

7 Repeat step 3 through step 6 for other members.

8 Specify the **layout** for the members in the worksheet.

9 **Preview** the members to be displayed in the worksheet.

10 Click **OK**.

Related Topics

"Clearing All Member Selections" on page 137

"Previewing Members" on page 131

"Removing Members from Rules" on page 132

"Reordering Member Display in Worksheets" on page 138

"Saving Member Selections" on page 140

"Searching for Members" on page 130

"Selecting Members Using Attributes" on page 127

"Specifying Latest Period To-Date" on page 134

"Specifying Member Criteria" on page 128

"Specifying Member Layout in Worksheets" on page 133

"Specifying View Methods" on page 130

Selecting Members Using Attributes

If the database outline includes attribute dimensions, you can use the Essbase Member Selection dialog box to select members containing certain attributes.

➤ To select members using attributes:

1 In **Essbase Member Selection**, select a dimension containing attributes in **Rules**.

2 Right-click to display a shortcut menu.

3 Select **Subset** from the shortcut menu.

4 In **Subset**, scroll down the left list box and select an attribute.

For example, in the Product dimension, you can select Caffeinated_True.

The maximum number of conditions you can set in the Subset dialog box is 50 items.

5 Select **NOT** if you want the selection to include only the members without the value.

6 Select the value from **Subsetting Value**, and then click **Add as AND Condition**.

7 Repeat step 4 and step 5 for each set of criteria, and then click **Add as AND Condition** or **Add as OR Condition**.

- AND—Selection must meet the current criteria and the one before it.
- OR—Selection must meet the current criteria or the one before it.

To group two or more subsetting values, select the first value and click Add, and then select the next value and click Add .

Each item in the Conditions list box can contain the left or right parenthesis, but not both. An error message displays if parentheses are unmatched.

8 To preview the list of criteria you selected to display in the worksheet, click **Preview**.

9 Click **OK**.

10 To view the results of the member selection, click **OK**.

Related Topics

Specifying Member Criteria

You can further define a member name, generation name, or level name to pinpoint criteria that members need for the member selection.

➤ To specify member criteria:

1 In **Essbase Member Selection**, select an item in **Rules** and right-click to display a shortcut menu.

2 Select **Subset** from the shortcut menu.

3 In **Subset**, select from the choices in the left list box:

- **User-defined Attribute** lists all known user-defined attributes (UDAs) for the dimension (specified in the outline using Administration Services Console) in the right list box. Subsetting by UDA selects all members that contain the specified UDA.

    For example, subsetting by UDA, 2-liter bottle, for the Product dimension returns all members (soda products in this case) with the attribute 2-liter bottle.

- **Generation Name** lists the generation names in the Subsetting Values list box. Subsetting by generation name selects all members under the specified member that belong to the specified generation name.

    For example, subsetting by Gen,2 for the Market dimension returns the regions East, West, South, and Central.

- **Level Name** lists the level names in the Subsetting Values list box. Subsetting by level name selects all members under the specified member that belong to the specified level name.

    For example, subsetting by Lev1,Year for the Year dimension returns the quarters, Qtr1, Qtr2, Qtr3, and Qtr4.

- **Pattern** enables you to enter a pattern string. Essbase supports the single character wildcard symbol, ?, and trailing asterisk wildcard symbol, *. Examples of valid wildcard strings are J?n and 100*. Examples of invalid wildcard strings are *-10 and *10*. Subsetting by pattern matching selects all members under the specified member that match the text string.

For example, specifying the pattern match J* for the Year dimension returns Jan, Jun, and Jul.

> **Note:** If the selected item from the Rules list box is a generation or level name, User-defined Attribute and Pattern are the only choices. The maximum number of conditions you can set in the Subset dialog box is 50 items.

4   Select **NOT** if you want the selection to include only the members without the value.

5   Select the value from **Subsetting Value**, and then click **Add as AND Condition**.

6   Repeat step 3 and step 4 for each set of criteria, and then click **Add as AND Condition** or **Add as OR Condition**.

- AND—Selection must meet the current criteria and the one before it

- OR—Selection must meet the current criteria or the one before it

To group two or more subsetting values, select the first value and click Add, and then select the next value and click Add.

Each item in the Conditions list box can contain the left or right parenthesis, but not both. An error message is displayed if parentheses are unmatched.

7   To preview the list of criteria you selected to display in the worksheet, click **Preview**.

8   Click **OK**.

Related Topics

Specifying View Methods

In the Essbase Member Selection dialog box, you can view and select dimension members in various ways.

➤ To view members using another view method, from **View Method**, select one:

- **By Member Name**—View members by member name.
- **By Generation Name**—View members by generation name.
- **By Level Name**—View members by level name.
- **By Dynamic Time Series**—View members of a time dimension by Dynamic Time Series name (for Time dimension only)

> **Note:** To view members by Dynamic Time Series names, the Application Designer needs to set the Dynamic Time Series members in the database outline on the server.

Related Topics

Searching for Members

The Essbase Member Selection dialog box enables you to do pattern match searches for members in the selected dimension. Essbase accepts these wildcard symbols: trailing asterisk, *, and single-character match, ?.

➤ To search for a member:

1 Select **Essbase**, and then **Member Selection**.

2 In **Essbase Member Selection**, click **Find**.

3 In **Find Member**, enter the text string (a member name or pattern) you want to search for.

Examples of valid text strings are: Ja*, M?n, and M??n. Examples of invalid text strings are: *-10 and J*n.

4 To find the first member within the dimension that matches the text string, click **Find**.

5 Click **Find Next** (if available) to search for the next occurrence of the text string.

Continue to click Find Next until all matching text strings are found.

If Find Next is not available, all occurrences of the text string are found.

The Find Member dialog box locates the members that match the text string in outline order and keeps them selected so that they can be added to the Rules list box as a group.

6 Click **Close**.

Related Topics

Previewing Members

After selecting members, you can preview the list of selected members to see which members are displayed in the worksheet. Upon reviewing the list, you can select to modify the list or accept the list of members to be displayed.

➤ To preview the member selection:

1 Click **Preview.**

2 In **Member Preview**, click **Close** after previewing the member selection.

Related Topics

Removing Members from Rules

The Rules list box contains selection rules that define which members are to be displayed in the spreadsheet.

➤ To remove members from the Rules list box:

1 Select the member you want to remove from **Rules.**

2 Click **Remove Item.**

Removing a member also removes all its corresponding subsetting conditions.

3 Repeat step 1 and step 2 to remove other selection rules.

You can remove only the top-level item with the Remove Item button. To remove individual subsetting conditions, you must return to the Subset dialog box and use its Remove Item button.

➤ To remove all members from **Rules,** click **Remove All.**

Related Topics

Specifying Member Layout in Worksheets

After member selection, you must define how you want the members to be displayed in the worksheet. You can select to:

- Insert members down a column and before an active cell.

- Insert members down a column, overwriting the active cell.

- Insert members across a row and before an active cell.

- Insert members across a row, overwriting the active cell.

➤ To insert members down a column and before an active cell:

1 In **Essbase Member Selection**, select **Place Down the Sheet.**

2 Select **Insert List Before Active Cell.**

3 Click **OK.**

➤ To insert members down a column, overwriting the active cell:

1 In **Essbase Member Selection**, select **Place Down the Sheet.**

2 Clear **Insert List Before Active Cell.**

3 Click **OK.**

➤ To insert members across a row and before an active cell:

1 In **Essbase Member Selection**, clear **Place Down the Sheet**.

2 Select **Insert List Before Active Cell** .

3 Click **OK**.

➤ To insert members across a row, overwriting the active cell:

1 In **Essbase Member Selection**, clear **Place Down the Sheet**.

2 Clear **Insert List Before Active Cell**.

3 Click **OK**.

Related Topics

Specifying Latest Period To-Date

Dynamic Time Series members are predefined members used in to-date calculations. Dynamic Time Series members do not appear as members in the database outline; instead, they represent a generation in a Time dimension. For example, in the Sample Basic database, the Application Designer can create a generation name called Quarter for generation 2 of the Year dimension containing the data for Qtr1, Qtr2, Qtr3, and Qtr4. When you create the generation name Quarter, Essbase creates and enables a Dynamic Time Series member called Q-T-D.

To use Dynamic Time Series in calculations, you first define the latest time period for which you want data. The latest time period is the level 0 member in a Time dimension. In the Sample Basic database, the level 0 members are the months of the year: Jan, Feb, Mar, and so on. If the current

month is August, and you want to know the sales data for the quarter up to the current month, Dynamic Time Series calculation gives you the sales data for the months of July and August.

➤ To specify the latest time period to use:

1   In **Rules**, select a Dynamic Time Series member (for example, Q-T-D).

2   Right-click and select **Specify Latest**.

3   In **Select Latest Period**, select a value from the list box.

    The default selection is the first level 0 member in the list box.

4   Click **OK**.

Related Topics

Suppressing Shared Members

You can suppress shared members for generation and level names only so that shared members do not appear multiple times in the spreadsheet.

➤ To suppress shared members:

1   In **View Method**, select **By Generation Name** or **By Level Name**.

2   In **Output Options**, select **Suppress Shared Members**.

Related Topics

Viewing All Members

You can view all levels of the selected dimension with one mouse click; however, if you expand a dimension containing many members, it may take a long time to display all members.

➤ To view all levels of the selected dimension, click **Expand to Descendants.**

Related Topics

Clearing All Member Selections

If you must deselect the member selections you made, you can easily clear all selections with one mouse click.

➤ To clear all member selections in **Member**, click **Clear**.

Related Topics

Viewing Member Formulas

You can view the database formula of the member that is currently in focus in the Member list box.

Note: The formula that is displayed is the last formula applied to the selected member, which may differ from the database outline formula associated with the member.

➤ To view the formula of a member:

1 Click **Member Information**.

The Member Information dialog box displays the formula of the member in the Formula list box.

2 Click **OK** after you finish viewing the formula.

Related Topics

Reordering Member Display in Worksheets

After selecting members, you can modify the order you want Essbase to display the members in the worksheet. The Move Item Up and Move Item Down buttons move the selected item and its associated subset conditions one position up or down, respectively, each time you click the button. You can move only the top-level item (the member you selected from the Members list box), not the individual subset conditions.

➤ To move a member up:

1 In **Rules**, select a member to move up the list.

2 Click **Move Item Up**.

3 Repeat step 2 until the member is at the desired location.

➤ To move a member down:

1 In **Rules** select a member to move down the list.

2 Click **Move Item Down**.

3 Repeat step 2 until the member is at the desired location.

Related Topics

Opening Member Selections

You can open member selections to reuse or modify.

➤ To open a member selection from your computer:

1   In **Essbase Member Selection**, click **Open**.

2   In **Open Selection Object**, select **Client**.

3   To prevent other users from modifying the object while you are using it, select **Lock Object**.

4   Select **Merge with Existing Selection** to append the selected object to the current member selection.

    If you open another selection object without selecting Merge with Existing Selection, all previously opened selection objects become unlocked.

5   To select from a list of available objects, perform one action:

    ● Select the application and the database to save the object on the server.

    a. Select from the list of available objects in **Selection Object**.

    b. Click **OK**.

    ● Click **File System** to open an object from another location.

    a. In **Open**, select the directory to open the object from and enter the file name.

    b. Click **Open**.

➤ To open a member selection from the server:

1   In **Essbase Member Selection**, click **Open**.

2   In **Open Selection Object**, select **Server**.

3   Select the application from **Application** and the database from **Database**.

4   Select from the list of available objects in **Selection Object**.

5   To prevent other users from modifying the object while you are using it, select **Lock Object**.

6   Select **Merge with Existing Selection** to append the selected object with the current member selection.

   If you open another selection object without selecting Merge with Existing Selection, all previously opened selection objects become unlocked.

7   Click **OK**.

Related Topics

Saving Member Selections

You can save member selections so that you can reuse them at another time. You can also merge saved member selections with the current selection, so that you can combine them to produce more flexible reports.

➤ To save a member selection on your computer:

1   In **Essbase Member Selection**, click **Save**.

2 From **Save Selection Object**, select **Client** as the location to which to save the object.

3 To specify the name of the object, do one of two things:

- Enter the name of the object in **Selection Object**.

a. Select the application and the database to save the object on the client.

b. Click **OK**.

- Click **File System** to specify another location to save the object.

a. In **Save As**, select the directory to save the object to and enter the file name.

b. Click **Save**.

➤ To save a member selection on the server:

1 In **Essbase Member Selection**, click **Save**.

2 From **Save Selection Object**, select **Server** as the location to which to save the object.

3 Select the application from **Application** and the database from **Database**.

4 Enter the name of the object in **Selection Object**.

5 Click **OK**.

Related Topics

Displaying the Save Dialog Box when Exiting Member Selection

You can enable or disable the prompt to save the member selection when you exit the Essbase Member Selection dialog box.

➤ To set the option prompting you to save member selection:

1 Select **Essbase**, and then **Options**.

2 In **Global**, select **Display Save Dialog**.

Related Topics

"Opening Member Selections" on page 139

"Saving Member Selections" on page 140

10

Working with Linked Reporting Objects

Linking Files to Data Cells

You can link an external file to a cell in an Essbase database. The linked file becomes a linked reporting object (LRO) that users with database access can retrieve.

➤ To link a file to a data cell:

1 Open a worksheet and connect to an instance of Essbase Server.

2 Select **Essbase**, and then **Retrieve**.

3 Select an Essbase **data cell**.

You can link objects only to data cells and not to cells containing member names.

4 Select **Essbase**, and then **Linked Objects**.

5 In **Linked Objects Browser**, click **Attach**.

6 In **Attach Linked Object**, select **File** from **Attachment Type**.

7 Under **File Name**, enter the name of the file to attach, or click **Browse** to select a file.

8 **Optional:** Under **File Description**, enter a brief description for the file.

9 Click **OK**.

Related Topics

Creating Cell Notes

A cell note is a brief text annotation (up to 599 characters) that you associate with a data cell in an Essbase database. Users with access to the database can retrieve the note.

To link information that is longer than 599 characters, create an external file containing the information, and link the file to the cell. See .

➤ To create a cell note:

1 **Open a worksheet and connect to an instance of Essbase Server.**

2 **Select Essbase, and then Retrieve.**

3 **Select a data cell.**

   You can link objects only to data cells and not to cells containing member names.

4 **Select Essbase, and then Linked Objects.**

5 **In Linked Objects Browser, click Attach.**

6 **In Attach Linked Object, select Cell note from Attachment Type.**

7 **In Cell Note edit box, enter the text to store in the cell note.**

8 **Click OK.**

Related Topics

Linking URLs to Data Cells

A URL is a string that identifies the location of a resource on the World Wide Web, such as a document, image, downloadable file, service, electronic mailbox, or other resource. Examples of URLs are http://www.oracle.com, ftp://ftp.oracle.com, D:/ESSBASE/docs/index.htm. You can

link a URL to a data cell so that when you view this linked object, the default Web browser opens, displaying the URL.

➤ To link URLs to a data cells:

1 Open a worksheet and connect to an instance of Essbase Server.

2 Select **Essbase**, and then **Retrieve**.

3 Select a **data cell**.

   You can link objects only to data cells and not to cells containing member names.

4 Select **Essbase**, and then **Linked Objects**.

5 In **Linked Objects Browser**, click **Attach**.

6 In **Attach Linked Object**, select **URL** from **Attachment Type**.

7 In **Location**, enter the URL.

   The maximum number of characters you can enter is 512.

8 In **URL Description**, enter comments about the URL.

   The maximum number of characters you can enter is 80.

9 Click **OK**.

Related Topics

Accessing Linked Files

An LRO is a cell note, an external file, or a URL that you link to a cell in an Essbase database. Users with access permission can access the LROs to view or edit their content.

➤ To access a linked file:

1 Open the worksheet and connect to an instance of Essbase Server.

2 To retrieve data into the worksheet, select **Essbase**, and then **Retrieve**.

3 Select the **data cell** to which the object is linked.

   In Spreadsheet Add-in, you can identify a linked object by setting a style for it.

4 Select **Essbase**, and then **Linked Objects**.

The objects linked to the selected cell appear in the Linked Objects Browser dialog box.

5   **Select the file you want to access.**

The next step depends on the action you want to perform with the file:

- To view or launch a linked file:

a.   Click **View/Launch**.

Essbase retrieves the file and sends it to your computer. If the file is an executable file, your computer launches it. If the file is a document, such as a Microsoft Word or Excel file, your computer launches the application and loads the file. (If the document is not associated with an application, you must create the association. See the Microsoft Windows documentation.)

b.   Close the application when done viewing the file.

- To edit the contents of a linked file:

a.   To launch the file editing application, click **View/Launch**.

b.   Edit the file and save it to your local disk drive, making note of the file name.

c.   Close the editing application and return to the **Linked Objects Browser**.

d.   Click **Edit**.

e.   In **Re-Attach Linked Object**, enter the name of the edited file, and then click **OK**.

Related Topics

Accessing Cell Notes

An LRO is a cell note, an external file, or a URL that you link to a cell in an Essbase database. Users with access permission can access the LROs to view or edit their content.

➤   To access a cell note:

1   **Open the worksheet and connect to an instance of Essbase Server.**

2   **Select Essbase, and then Retrieve.**

3   **Select the data cell to which the object is linked.**

In Spreadsheet Add-in, you can identify a linked object by setting a style for it.

4   **Select Essbase, and then Linked Objects.**

The objects linked to the selected cell appear in the Linked Objects Browser dialog box.

5   **Select the cell note to access.**

The next step depends on the action to perform with the cell note.

- To view a cell note:

a. Click **View/Launch**.

b. Click **OK** when done viewing.

- To edit a cell note:

a. Click **Edit**.

b. Edit the text in the cell note.

c. Click **OK** when you are finished making changes.

Related Topics

Accessing URLs

An LRO is a cell note, an external file, or a URL that you link to a cell in an Essbase database. Users with access permission can access the LROs to view or edit their content.

➤ To access a URL:

1   **Open the worksheet and connect to an instance of Essbase Server**

2   **Select Essbase, and then Retrieve.**

3   **Select the data cell to which the object is linked.**

In Spreadsheet Add-in, you can identify a linked object by setting a style for it.

4   **Select Essbase, and then Linked Objects.**

Essbase displays the objects linked to the selected cell in the Linked Objects Browser dialog box.

5   **Select the URL to access.**

The next step depends on the action to perform with the URL.

- To view or launch a URL:

a. Click **View/Launch**.

Essbase opens the default Web browser. Essbase checks the syntax of the URL and displays an error message if the syntax is wrong. The Web browser checks the existence of the URL and displays an error if the URL does not exist.

    b. Close the browser when you are finished viewing the URL.

● To edit the URL location:

    a. Click **Edit.**

    b. In **Location**, enter the URL to attach the cell to.

    c. **Optional:** In **URL Description**, enter a description about the URL.

    d. Close **Edit URL** and return to **Linked Objects Browser**.

Related Topics

Deleting LROs

An LRO is a cell note, an external file, or a URL that you link to a cell in an Essbase database. Deleting the object removes it from the Essbase database.

➤ To delete a linked file, cell note, or URL:

1 Open the worksheet and connect to an instance of Essbase Server.

2 Select **Essbase**, and then **Retrieve.**

3 Select the **data cell** to which the object is linked.

4 Select **Essbase**, and then **Linked Objects.**

The objects linked to the selected cell appear in the Linked Objects Browser dialog box.

5 Select the object to delete.

6 Click **Delete.**

Related Topics

Accessing Linked Partitions

Linked partitions enable the Essbase application designer to link Essbase databases containing dimensions that differ without losing access to all dimensions in the databases. See the *Oracle Essbase Database Administrator's Guide*.

The Essbase application designer can set styles for cells tagged as linked objects so that users can more easily find linked partition cells, which are access points to the linked partition.

When you access a linked partition cell, the Linked Objects Browser displays a list of possible partitions and other linked reporting objects (for example, cell notes and application files) to access.

When you select a partition, Essbase creates a worksheet containing corresponding members and dimensions for that cell in the linked partition. You can perform operations such as Zoom In and Zoom Out to get information on the worksheet.

➤ To access linked partitions:

1 Locate a linked object cell, as indicated by its style.

2 Locate a linked object cell, as indicated by the style applied to the cell.

3 To open **Linked Objects Browser**, select **Essbase**, and then **Linked Objects**.

Instead of using the Linked Objects command, you can select Enable Linked Object Browsing in the Essbase Options dialog box (Global page) so you can double-click a linked object to open Linked Objects Browser.

| **Caution!** | If you enable double-clicking for linked object browsing, double-clicking behavior changes for retrieving data and performing drill actions. |

4 Click **View/Launch**.

If the cell is a linked partition cell, Essbase creates a worksheet containing corresponding dimensions and members for the cell in the linked partition.

Notes:

● You need the proper access permissions to access the linked partition. If your user account and password match the account information for the linked partition, Essbase uses this information to establish connection with the linked partition. Otherwise, Essbase displays the Essbase System Login dialog box for you to enter the user account and password information manually.

● Formulas are not preserved across partitions.

Related Topics

Accessing Relational Data Through Integration Services

From Spreadsheet Add-in, you can access detail-level drill-through reports that are based on the member combinations of Essbase data cells in the worksheet. Using the Drill-Through Wizard, you can also customize a predefined drill-through report.

To help you identify the cells in the worksheet with associated drill-through reports, you can set styles for cells tagged as drill-through. When you double-click a drill-through cell in the worksheet, Essbase displays the Linked Objects Browser dialog box, which displays a drill-through report entry. This dialog box also displays entries for linked partitions and other linked object types (for example, cell notes and application files). After you execute or customize the drill-through report, Essbase retrieves data from the relational source and displays the results in a worksheet.

Note: The person at your organization who develops drill-through reports specifies whether you can customize a report and whether you must log on to Oracle Essbase Integration Services and the relational data source.

➤ To access drill-through reports from Spreadsheet Add-in:

1 Locate a **drill-through cell**, as indicated by its style.

Select one cell or a continuous range of cells in the worksheet to display all drill-through reports associated with the selected cell(s).

2 To open **Linked Objects Browser**, select **Essbase**, and then **Linked Objects**.

Alternatively, click the Enable Linked Object Browsing in the Essbase Options dialog box (Global page), which enables you to double-click a linked object cell to open Linked Objects Browser. This option works only with single-cell selection. If you select a range of cells, use the Linked Objects menu command.

3 Select the drill-through report entry, and then click **View/Launch**.

Essbase launches drill-through. If only one report exists for the selected cell(s), and if that report is not designed to be customized, drill-through generates the report and displays the results in a worksheet. The worksheet is added after the current worksheet.

4 If you are prompted with the Drill-Through Login to connect to Integration Server and the relational data source, enter the Integration Server name, and your database user name and password.

Related Topics

11

Working with Visual Explorer

Launching Visual Explorer

You can launch Visual Explorer using one of these methods.

➤ To launch Visual Explorer from the Excel worksheet, select one method:

● Select **Essbase**, and then **Visualize & Explore**.

● If you are not connected to an Essbase application and database, select **File**, and then **Connect to Data Source**.

➤ To launch a Visual Explorer workbook or bookmark from Windows Explorer:

1 In **Windows Explorer**, navigate to the location where the Visual Explorer workbook (TWB) or bookmark (TBM) is saved.

2 Double-click the object.

Visual Explorer is launched and displays the visualization that you selected.

Note: See the online help that is accessed from the Help menu in Visual Explorer.

Related Topics

"Essbase System Login Dialog Box for Visual Explorer" on page 391

"Logging On to Essbase from Visual Explorer" on page 154

"Retrieving Data Using Visual Explorer" on page 154

"Retrieving Multidimensional Data Using Visual Explorer" on page 155

Logging On to Essbase from Visual Explorer

To use Visual Explorer, you first must log on to an Essbase Server (see "Logging On to Essbase" on page 23).

If you are logged in to an Essbase Server from Excel, the connection information associated with the active Excel worksheet is automatically transferred to Visual Explorer.

If you are not logged in to an Essbase Server from Excel, you can connect to Essbase from Visual Explorer.

➤ To log on to an Essbase Server from Visual Explorer:

1   In Visual Explorer, select **Data**, and then **Connect to Data Source**.

2   In **Server**, select the server to access, or enter the server name.

3   Enter your **user name**.

4   Enter your **password**.

5   Click **OK**.

    When the server connection is complete, a list of available application and database pairs displays in the Application/Database list.

6   In **Application/Database**, select the application and database pair to connect to, and then click **OK**.

    If the application is not running, Essbase automatically starts it. Essbase may pause briefly as the application loads; the time required to start an application depends on the size and number of databases contained within the application and the size of their indexes.

    Note: See the online help that is accessed from the Help menu in Visual Explorer.

Related Topics

"Essbase System Login Dialog Box for Visual Explorer" on page 391

"Launching Visual Explorer" on page 153

"Retrieving Data Using Visual Explorer" on page 154

"Retrieving Multidimensional Data Using Visual Explorer" on page 155

Retrieving Data Using Visual Explorer

Visual Explorer enables users to transfer data from the Visual Explorer interface to an Excel worksheet. After you create a view of data in Visual Explorer, you can transfer the underlying data to the active Excel worksheet by using the Update Excel command.

You can also transfer data to a worksheet within the active Excel workbook using the Update Excel (New Worksheet) command.

➤ To retrieve data from Visual Explorer into a worksheet in Spreadsheet Add-in:

1   In Visual Explorer, select **File**.

2   Perform one action:

- To retrieve data into the active worksheet, select **Update Excel**.

- To retrieve data into a worksheet within the active Excel workbook, select **Update Excel** (**New Worksheet**).

3   View the data in the Excel worksheet.

Notes:

- When you select Update Excel, Visual Explorer sends data to the Excel worksheet that was previously used if the "Update Excel (New Worksheet)" was invoked. If no worksheet is available, data is sent to the Excel worksheet from which the Essbase connection being used by Visual Explorer was originally established. If the original Essbase connection was not established from Excel, the Update Excel command is not selectable, and users must use the "Update Excel (New Worksheet) command.

- When you select the Update Excel (New Worksheet) command, Visual Explorer sends data to a worksheet within the active Excel workbook.

- See the online help that is accessed from the Help menu in Visual Explorer.

Related Topics

Retrieving Multidimensional Data Using Visual Explorer

Visual Explorer provides Essbase users with powerful analytics in a highly graphical format. It enables users to unlock the information stored in multidimensional databases using a free-form canvas for exploring and analyzing data. Visual Explorer is launched directly from the Essbase menu in Spreadsheet Add-in, using the Visualize & Explore command. With its drag and drop interface, Essbase users can quickly summarize and visualize data from an Essbase database.

Visual Explorer gives users a quick and simple path to analysis by providing these benefits:

- **Making Essbase databases approachable**—Average business people find that pictures of data are "friendly" and approachable. The graphical quality of Visual Explorer encourages people to interact with data. It pushes interactive reporting and analysis deeper into the organization.

- **Simplifying reports**—Multidimensional problems require multidimensional views. Visual Explorer enables you to easily present sophisticated problems in simple graphical displays.

- **Fast ad hoc analysis**—Ad hoc analysis is time consuming. It typically involves the generation of a wide variety of various "slices" of a problem. Visual Explorer provides an exploratory canvas that enables users to easily find trends, outliers, correlations, and comparisons.

Visual Explorer offers users the option to pass data back to the active Excel worksheet from which it was launched, or to insert the data into a worksheet in the active Excel workbook where additional analysis can be performed.

Visual Explorer Workflow Example

Meredith is a loan manager for a large financial institution.

1. Meredith is asked to investigate falling profit margins. She opens Excel and connects to Essbase using Spreadsheet Add-in.

2. She launches Visualize & Explore from Excel. By dragging fields onto a visual canvas, she creates a snapshot of the business in seconds. The chart shows loan principal and profit for every product in every region. Two areas of the business immediately grab her attention.

3. She drills in and finds a handful of negative outliers. She filters the visualization so it only shows loans made by her division.

4. She creates a visual table, rerunning the prior analysis by State by just dragging the State field. It is now clear that the problematic transactions occurred in Nevada and California; and only for certain products.

5. She runs profitability trends for these products (for every region and every month). The total time required to do this: 90 seconds. She discovers that the transactions are affecting general trends for those regions. She never found ad hoc analysis of cubes this easy.

6. She presses the Update Excel icon and all data behind the Essbase visualization is automatically retrieved into Excel for further work and collaboration.

Figure 1 illustrates this Visual Explorer workflow, clockwise starting with step 1.

Figure 1   Visual Explorer Workflow

Note: See the online help that is accessed from the Help menu in Visual Explorer.

Related Topics

12

Spreadsheet Toolkit

About Spreadsheet Toolkit

Oracle's Hyperion® Essbase® Spreadsheet Toolkit enables you to customize and automate your use of Essbase using Excel macros and Visual Basic for Applications (VBA) functions. To use the macros or functions, you must understand Excel macros or the VBA programming language and Spreadsheet Add-in software.

Caution! Manipulation of worksheets in VBA such as naming worksheets or moving worksheets may not work when Query Designer is running.

Opening Spreadsheets Containing Macros in Excel

The recommended macro security setting in Excel is Medium.

When the macro security setting in Excel is set to Medium, and you use Excel to open spreadsheets containing macros, the Security Warning dialog box is displayed.

This behavior is normal when opening Excel macros. Click Enable Macros to continue.

VBA Functions

Essbase includes a library of VBA functions for use in Excel. The Essbase VBA library gives you the same functionality as the spreadsheet macros, except in a Visual Basic format with additional functions.

Three types of VBA functions are included:

- Spreadsheet macro equivalents
- Menu equivalents

- Functions exclusively for Excel Visual Basic

The functionality of the macro equivalents matches that of the spreadsheet macros. While you can continue to call the spreadsheet macros in an Excel Visual Basic program, it is more efficient to use the library of Essbase VBA functions. For example, instead of using the EssConnect macro, you should use the EssVConnect function.

The menu equivalents are Visual Basic functions that execute the Essbase menu commands.

One function enables you to use the Visual Basic API inside Excel.

Caution!	Manipulation of worksheets in VBA, such as naming worksheets or moving worksheets, may not work when Query Designer is running.

VBA functions topics:

VBA Function Reference

Consult the Contents pane for an alphabetical listing of VBA functions.

EssVCalculate

Description

Initiates a calculation on the server using a calculation script.

Syntax

```
EssVCalculate(sheetName, calcScript, synchronous)
ByVal sheetName As Variant
ByVal calcScript As Variant
ByVal synchronous As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

calcScript

Text name of the calculation script on the server in the database directory to run. To run the default calculation script, use "[Default]". If *calcScript* is Null or Empty, a dialog box prompts the user for a calculation script to run.

synchronous

Boolean value indicating whether the calculation should be run synchronously. If *synchronous* is Null or Empty, True is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVCalculate Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
calcScript As Variant, ByVal synchronous As Variant) As Long

Sub RunCalculate()
X = EssVCalculate(Empty, "Default", False)
If X = 0 Then
MsgBox("Calculation complete.")
Else
MsgBox("Calculation failed.")
End If
End Sub
```

EssVCancelCalc

Description

Cancels the calculation being run on the server.

Syntax

```
EssVCancelCalc(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of the worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVCancelCalc Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long

Sub CancelCalc()
X = EssVCancelCalc("[Book2.xls]Sheet1")
If X = 0 Then
MsgBox("Calculation canceled.")
```

```
Else
MsgBox("Calculation not canceled.")
End If
End Sub
```

Note: You cannot cancel synchronous calculations.

EssVCascade

Description

Cascades on the selection, and generates multiple worksheets.

Syntax

```
EssVCascade(sheetName, range, selection, path, prefix, suffix, level, openFile,
copyFormats, overwrite, listFile)
ByVal sheetName As Variant
ByVal range As Variant
ByVal selection As Variant
ByVal path As Variant
ByVal prefix As Variant
ByVal suffix As Variant
ByVal level As Variant
ByVal openFile As Variant
ByVal copyFormats as Variant
ByVal overwrite As Variant
ByVal listFile As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the cascade. If *range* is Null or Empty, the whole worksheet is used.

selection

Range object which refers to the members to be cascaded. If *selection* is Null or Empty, the active cell is used.

path

Text name of the destination directory for worksheets created. If *path* is Null or Empty, the current directory is used.

prefix

Text name of the first part of the file names of the worksheets generated. If *prefix* is Null or Empty, no prefix is added to the file name.

suffix

Text name of the last part of the file names of the worksheets generated. If *suffix* is Null or Empty, no suffix is added to the file name.

Level

Note: You can use the Level Constants instead of 1-7 to set the cascade level (see "VBA Level Constants" on page 218).

Number indicating the granularity of the cascade, as shown in Table 7.

Table 7   Level Numbers for Cascade

Level	Action
1	Next level
2	All levels
3	Bottom level
4	Sibling level
5	Same level
6	Same generation
7	Calc level

If *level* is Null or Empty, 1 is used.

openFile

Boolean value indicating whether the newly created worksheets should remain open. If *openFile* is Null or Empty, False is used.

copyFormats

Boolean value indicating whether the formatting from the parent worksheet should be copied to the newly created worksheets. If *copyFormats* is Null or Empty, True is used.

overwrite

Boolean value indicating whether the newly created worksheets can overwrite previously saved worksheets. If *overwrite* is Null or Empty, True is used. False means the user can rename the worksheets before saving.

listfile

Boolean value indicating whether a report file is created. If *listfile* is Null or Empty, False is used. True means a file is created in the path with the name `prefix0suffix.lst`.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVCascade Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal range
As Variant, ByVal selection As Variant, ByVal path As Variant, ByVal prefix As Variant,
ByVal suffix As Variant, ByVal level As Variant, ByVal openFile As Variant, ByVal
copyFormats as Variant, ByVal overwrite As Variant, ByVal listFile As Variant) As Long

Sub Cascade()
X=EssVCascade("[Book2.xls]Sheet1", RANGE("A1:G52"), RANGE("B3"), "C:\ESSBASE\CLIENT
\SAMPLE", "HQ", "97", 3, True, True, True, True)
If X = 0 Then
MsgBox("Cascade successful.")
Else
MsgBox("Cascade failed.")
End If
End Sub
```

Notes:

- The files created are named `prefixXsuffix.xls`, where prefix and suffix are supplied parameters, and X indicates the number of the worksheet generated. The first worksheet generated is `prefix1suffix.xls`, the second `prefix2suffix.xls`, and so on.

- The number of worksheets generated equals the number of member combinations that exist in the level you specified in level. Keep the prefix and suffix short enough to leave room in the file name for the maximum number of combinations.

EssVCell

Description

Retrieves one value from the server.

Syntax

```
EssVCell(sheetName, memberlist)
ByVal sheetName As Variant
ParamArray memberlist As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

memberlist

A list of strings which describe the member combination for which a data value is to be retrieved. If *memberlist* is Null or Empty, the top level value is used.

Return Value

Returns the value of the data point if successful. Returns #N/A if the worksheet cannot be determined or is not logged in. Returns #VALUE! if a member name is incorrect.

Example

```
Declare Function EssVCell Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ParamArray
memberlist() As Variant) As Variant

Sub InCell()
Dim X As String
X=EssVCell("[Book2.xls]Sheet1", "Qtr1", "Actual", "Oregon")
If X = "#N/A" Then
MsgBox("Not logged in, or sheet not active.")
Else
If X = "#VALUE!" Then
MsgBox("Member name incorrect.")
Else
MsgBox(X + " Value retrieved successfully.")
End If
End If
End Sub
```

Note: The value of the data point returned is not placed in a cell in the worksheet automatically. To place the value in a cell, use the Visual Basic select method and the ActiveCell property. See the Visual Basic documentation.

EssVConnect

Description

Logs in to a server, application, and database.

Syntax

```
EssVConnect(sheetName, username, password, server, application, database)
ByVal sheetName As Variant
ByVal username As Variant
ByVal password As Variant
ByVal server As Variant
ByVal application As Variant
ByVal database As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

username

Text name of a user on the server.

password

Text name of the password for this user name.

server

Text name of the server to connect to.

application

Text name of the application to connect to.

database

Text name of the database to connect to.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVConnect Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
username As Variant, ByVal password As Variant, ByVal server As Variant, ByVal
application As Variant, ByVal database As Variant) As Long

Sub Conn()
X=EssVConnect(Empty, "User1", "password", "Local", "Sample", "Basic")
End Sub
```

Note: If a parameter, except sheetName, is Null or Empty, the Essbase System Login dialog box is displayed showing whatever information the function provided.

EssVDisconnect

Description

Logs out from a server.

Syntax

```
EssVDisconnect(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVDisconnect Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long
```

```
Sub DisConn()
X=EssVDisconnect(Empty)
End Sub
```

EssVFlashBack

Description

Restores your view of the database to the previous view.

Syntax

```
EssVFlashBack(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVFlashBack Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long

Sub FB()
X=EssVFlashBack(Empty)
End Sub
```

EssVFreeDataPoint

Description

Frees memory allocated by EssVGetDataPoint.

Syntax

```
EssVFreeDataPoint (Info)
ByRef Info As Variant
```

Parameters

Info

Variant array returned by EssVGetDataPoint.

Return Value

Returns 0 if successful, otherwise, returns -15.

Example

See for an example of EssVFreeDataPoint.

EssVFreeMemberInfo

Description

Frees memory allocated by EssVGetMemberInfo.

Syntax

```
EssVFreeMemberInfo(mbrInfo)
ByRef mbrInfo As Variant
```

Parameters

mbrInfo

The variant array returned by EssVGetMemberInfo

Return Value

Returns 0 if successful, otherwise, returns -15.

Example

See for an example of EssVFreeMemberInfo.

EssVGetCurrency

Description

Gets Essbase currency information from the specified worksheet.

Syntax

```
EssVGetCurrency(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of worksheet containing the currency information. *sheetName* is of the form
`"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns a string describing the current currency rate based on the member name in the currency outline. For example, if the active currency setting is Canadian dollars, Essbase returns (CN$). If no currency information exists, an empty string (or "") is returned. If an error occurs, a number is returned. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVGetCurrency Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As
Variant

Sub GetCurr()
X=EssVGetCurrency(Empty)
MsgBox ("Currency is: " + X)
End Sub
```

EssVGetDataPoint

Description

Gets member information for one data cell.

Syntax

```
EssVGetDataPoint (sheetName, cell, range, aliases)
By Val sheetName As Variant
By Val cell As Variant
By Val range As Variant
By Val aliases As Variant
```

Parameters

sheetName

Text name of the worksheet containing the currency information. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

cell

Cell name that describes the reference cell to get the member combination information for.

range

Range name that describes the reference area of the data used as the source of the retrieve.

aliases

Boolean value that indicates whether alias names are returned.

Return Value

Returns an array of member names.

Example

```
Declare Function EssVGetDataPoint Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
cell As Variant, ByVal range As Variant, ByVal aliases As Variant) As Variant

Declare Function EssVFreeDataPoint Lib "ESSEXCLN.XLL" (ByVal Info As Variant) As Long


Sub DataPointsSub()
Dim vt As Variant
Dim cbItems As Variant
Dim i As Integer
Dim pMember As String
vt = EssVGetDataPoint(Null, range("B3"), range("A1:F7"), False)
If IsArray(vt) Then
cbItems = UBound(vt) - LBound(vt) + 1
MsgBox ("Number of elements = " + Str(cbItems))
For i = LBound(vt) To UBound(vt)
MsgBox ("Member = " + vt(i))
Next
X = EssVFreeDataPoint(vt)
Else
MsgBox ("Return Value = " + Str(vt))
End If
End Sub
```

EssVGetGlobalOption

Description

Returns information about individual Essbase workspace options.

Syntax

```
EssVGetGlobalOption(item)
ByVal item As Long
```

Parameters

item

Number indicating which option is to be retrieved. *item* cannot be Null or Empty. Table 8 indicates which options are returned for which number.

Table 8   Item Number Options and Return Types

Item	Option	Return Data Type
1	Enable secondary button setting	Boolean
2	Enable double-clicking setting	Boolean
3	Enable FlashBack setting	Boolean
4	Enable retain member selection information setting **Note:** This setting is obsolete.	Boolean

Item	Option	Return Data Type
5	Specify message level setting 1 Info, Warning & Error messages 2 Warning & Error messages only 3 Error Messages only 4 No messages	Number
6	Enable display unknown members setting	Boolean
7	Enable route messages to log setting	Boolean
8	Enable purge log setting	Boolean
9	Enable double-clicking to browse Linked Reporting Objects setting	Boolean
10	Display Member Select Save dialog box setting	Boolean
11	Enable Navigate Without Data	Boolean

Return Value

Returns a number or Boolean value indicating the state of the requested option. If an error occurs, #VALUE! is returned. If *item* is not between 1 and 10, #NUM! is returned.

Example

This example sets the option for specifying a message level and checks whether the value set is valid.

```
Declare Function EssVGetGlobalOption Lib "ESSEXCLN.XLL" (ByVal item As Long) As Variant

Sub GetGlobal()
Dim X As String
X=EssVGetGlobalOption(5)
If X="#NUM!" Then
MsgBox("Invalid item ID specified.")
Else
If X="#VALUE!" Then
MsgBox("Error. Option could not be found.")
Else
MsgBox("Message level is set to " + X)
End If
End If
End Sub
```

EssVGetHctxFromSheet

Description

Returns the login context handle of the specified connected worksheet.

Syntax

```
EssVGetHctxFromSheet(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns 0 for failure. Failure may indicate that the worksheet is not logged in. Otherwise, the return value is the login context for the specified worksheet.

Example

```
' Functions from Excel VBA
Declare Function EssVGetHctxFromSheet Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As
Long
Declare Function EssVConnect Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
UserName As Variant, ByVal password As Variant, ByVal server As Variant, ByVal
application As Variant, ByVal database As Variant) As Long

' Functions from VB API
Declare Function EsbExport Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ByVal AppName As
String, ByVal DbName As String, ByVal FilePath As String, ByVal Level As Integer, ByVal
isColumns As Integer) As Long

Declare Function EsbGetProcessState Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ProcState As
Esb_PROCSTATE_T) As Long

Dim hCtx As Long
Dim sts As Long
Dim AppName As String
Dim DbName As String
Dim PathName As String
Dim Level As Integer
Dim Columns As Integer

Sub CheckContext()
'Check hCtx, a non zero value indicates the sheet
'is connected. If it is zero, Connect.
If hCtx = 0 Then
hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]")
If hCtx = 0 Then
X = EssVConnect("[SAMPVBA.XLS]", "RonC", "password", "magnolia", "Sample", "Basic")
hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]")
If hCtx = 0 Then
MsgBox("Error connecting to sheet.")
GoTo Quit
End If
If X <> 0 Then
MsgBox("Connect Failed. Error: " + X)
End If
```

```
End If
End If
AppName = "Sample"
DbName = "Basic"
PathName = "c:\export.txt"
Level = Esb_DATA_INPUT
Columns = Esb_NO

' Export it
sts = EsbExport(hCtx, AppName, DbName, PathName, Level, Columns)
If sts <> 0 Then
MsgBox ("Export Failed. Error " + Str$(sts))
End If
' Check Process State until Done
sts = EsbGetProcessState(hCtx, ProcState)
Do While ProcState.State = Esb_STATE_INPROGRESS
sts = EsbGetProcessState(hCtx, ProcState)
Loop
If sts = 0 Then
Sheets("Sheet1").Select
MsgBox ("Export Completed.")
Else
MsgBox ("Export failed.")
End If
Quit:
End Sub
```

Notes:

- These Essbase Visual Basic API functions should not be called with the context handle returned by EssVGetHctxFromSheet: EsbLogout, EsbSetActive, and EsbClearActive. The results are unpredictable and unsupported.

- Do not call the Essbase Visual Basic API function EsbInit in the same VBA module as EssVGetHctxFromSheet. The results are unpredictable and unsupported.

EssVGetMemberInfo

Description

Returns member relationship information.

Syntax

```
EssVGetMemberInfo(sheetName, mbrName, action, aliases)
ByVal sheetName As Variant
ByVal mbrName As Variant
ByVal action As Variant
ByVal aliases As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

mbrName

Text name of the member for which relationship information is obtained. This parameter is required because no default value exists.

action

Number indicating what type of relationship information is returned, as shown in Table 9. If *action* is Null or Empty, a value of EssChildLevel is used.

See .

Table 9   Action Parameter Numbers

Constant	Action	Description
EssChildLevel	1	Next level
EssDescendentLevel	2	All levels
EssBottomLevel	3	Bottom level
EssSiblingLevel	4	Sibling level
EssSameLevel	5	Same level
EssSameGenerationLevel	6	Same generation
EssCalculationLevel	7	Calc level
EssParentLevel	8	Previous or parent level
EssDimensionLevel	9	Dimension member belongs to

aliases

Boolean indicating whether alias names are returned. If *aliases* is Null or Empty, False is used.

Return Value

Returns a string array of member names if successful. Otherwise, it returns an error number indicating failure.

Example

```
Declare Function EssVGetMemberInfo Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
mbrName As Variant, ByVal action As Variant, ByVal aliases As Variant) As Variant

Declare Function EssVFreeMemberInfo Lib "ESSEXCLN.XLL" (ByRef memInfo As Variant) As
Long

Const EssBottomLevel = 3

Sub GetMemberInfo()
Dim vt As Variant
```

```
Dim cbItems As Variant
Dim i As Integer
Dim pMember As String

vt = EssVGetMemberInfo(Null, "Organization", EssBottomLevel, False)
If IsArray(vt) Then
cbItems = UBound(vt) + 1
MsgBox("Number of elements = " + Str(cbItems))
For i = 0 to UBound(vt)
MsgBox("Member = " + vt(i))
Next
Else
MsgBox("Return Value = " + Str(vt))
End If
X = EssVFreeMemberInfo(vt)
End Sub
```

EssVGetSheetOption

Description

Returns information about individual Essbase spreadsheet options.

Syntax

```
EssVGetSheetOption(sheetName, item)
ByVal sheetName As Variant
ByVal item As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "`[Book.xls]Sheet`". If *sheetName* is Null or Empty, the active worksheet is used.

item

Number indicating which option is to be retrieved. *item* cannot be Null or Empty. Table 10 indicates which options are returned for which number.

Note: Items 20 and 31 are not used.

Table 10   Item Number Options, Return Types, and Values

Item	Option	Return Data Type and Values
1	Set drill level setting 1 Next level 2 All levels 3 Bottom level 4 Sibling level 5 Same level 6 Same generation 7 Calc level	Number
2	Enable Include Selection setting	Boolean
3	Enable Within Selection Group setting	Boolean
4	Enable Remove Unselected Groups setting	Boolean
5	Specify Indent setting 1 No indentation 2 Indent sub items 3 Indent totals	Number
6	Enable suppress missing setting	Boolean
7	Enable suppress zeros setting	Boolean
8	Enable suppress underscores setting	Boolean
9	Specify Alias for missing text	Text
10	Enable Update mode setting (block storage databases only)	Boolean
11	Enable Retain on Retrieval formula preservation setting	Boolean
12	Enable adjust columns setting	Boolean
13	Enable alias names setting	Boolean
14	Specify alias names table setting	Text
15	Enable template retrieve mode	Boolean
16	Enable free form/Version 2.x mode	Boolean
17	Enable auto sort rows setting	Boolean
18	Enable use styles setting	Boolean
19	Specify No Access label	Text
21	Enable Retain on Keep Only and Remove Only formula preservation setting	Boolean

Item	Option	Return Data Type and Values
22	Enable Retain on Zooms formula preservation setting	Boolean
23	Enable formula fill setting	Boolean
24	Enable member names and alias setting	Boolean
25	Enable repeat member labels setting	Boolean
26	Enable sheet options for Query Designer setting	Boolean
27	Enable Latest Time Period setting	Boolean
28	Specify Latest Time Period	Text
29	Enable Hybrid Analysis	Boolean
30	Enables metadata sampling when performing a Zoom In operation	Boolean
32	Indicates the percentage of the members to retrieve when metadata sampling is enabled	Number
33	Enables display of the qualified name of the duplicate (non-unique) member in the Excel comment box	Boolean
34	Enables display of the qualified name of the duplicate member in the Excel spreadsheet	Boolean

Return Value

Returns the value of the current setting as a string, number, or Boolean. If an error occurs, #VALUE! is returned. When item is out of range, #NUM! is returned.

Example

```
Declare Function EssVGetSheetOption Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant,
ByVal item As Variant) As Variant

Sub GetSheet()
Dim X As String
X=EssVGetSheetOption("Sheet1", 6)
If X="#NUM!" Then
MsgBox("Invalid item ID specified.")
Else
If X="#VALUE!" Then
MsgBox("Error. Option could not be found.")
Else
MsgBox("Suppress Missing is set to " + X)
End If
End If
End Sub
```

EssVGetStyle

Description

Retrieves the specified styles information.

Syntax

```
EssVGetStyle (sheetName, styleType, dimName, item)
ByVal sheetName As Variant
ByVal styleType As Variant
ByVal dimName As Variant
ByVal item As Long
```

Parameters

sheetName

sheetName is the text name of the worksheet to perform the action. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

styleType

styleType specifies the style setting you want to get.

Table 11   styleType Style Settings

styleType	Style Setting
0	Dimension
1	Child Members
2	Parent Members
3	Shared Members
4	Read Only
5	Read/Write
6	Contains Formula
7	Dynamic Calculations
8	Linked Objects
11	Attributes
12	Integration Server Drill-Through

dimName

dimName is the dimension name if styleType is 0; otherwise set this parameter to Null.

item

item is the style you want to get.

Table 12   Item Styles

Item	Meaning	Return Data Type
1	Use style	Boolean
2	Font name	Text
3	Font size	Number
4	Bold	Boolean
5	Italic	Boolean
6	Underline	Boolean
7	Strikeout	Boolean
8	Foreground color	Number
9	Background color	Number
10	Border	Boolean

Table 13 lists foreground and background colors.

Table 13   Foreground and Background Colors

Integer	Color
1	Black
2	White
3	Red
4	Lime
5	Blue
6	Yellow
7	Fuchsia
8	Aqua
9	Maroon
10	Green
11	Navy
12	Olive
13	Purple
14	Teal

Integer	Color
15	Silver
16	Gray

Return Value

Returns text, number, or boolean indicating the state of the requested option. If an error occurs, #VALUE! is returned. If *styleItem* is not between 1 and 10, #NUM! is returned.

Example

This example gets the style for child members that is set to italic.

```
Declare Function EssVGetStyle Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
styleType As Variant, ByVal dimName As Variant, ByVal item As Long) As Variant

Sub GetStyle()
Dim X As String

X=EssVGetStyle("[Book2.xls]Sheet1", 1,Empty,5)
If X="#NUM!" Then
MsgBox("Invalid item ID specified.")
Else
If X="#VALUE!" Then
MsgBox("Error. Option could not be found.")
Else
MsgBox("Get style is set to " + X)
End If

End If
End Sub
```

EssVKeepOnly

Description

Retains only the selected member(s) in the worksheet and removes unselected members.

Syntax

```
EssVKeepOnly(sheetname, range, selection)
ByVal sheetName As Variant
ByVal range As Variant
ByVal selection As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used. The range must include the member names and data cells. If *range* is Null or Empty, the whole worksheet is used.

selection

Range object which refers to the member(s) that are kept. If *selection* is Null or Empty, the active cell is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVKeepOnly Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant, ByVal selection As Variant) As Long

Sub KOnly()
' Keep Only on one member name
X=EssVKeepOnly("[Book2.xls]Sheet1", RANGE("A1:G52"), RANGE("D2"))
If X = 0 Then
MsgBox("Keep Only successful.")
Else
MsgBox("Keep Only failed." + X)
End If

' Keep Only on two member names
X=EssVKeepOnly("[Book2.xls]Sheet1", RANGE("A1:G52"), RANGE("D2, A5"))
If X = 0 Then
MsgBox("Keep Only successful.")
Else
MsgBox("Keep Only failed." + X)
End If
End Sub
```

EssVLoginSetPassword

Description

Sets the password upon login, and logs the user out.

Syntax

```
EssVLoginSetPassword (sheetName, newPassword, oldPassword, server, userName)
ByVal sheetName As Variant
ByVal newPassword As Variant
ByVal oldPassword As Variant
ByVal server As Variant
ByVal userName As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

newPassword

Text name of the password you want to set for the user name.

oldPassword

Text name of the old password to replace for the user name.

server

Text name of the server you want to change the password for.

userName

Text name of the user name on the server.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVLoginSetPassword Lib "ESSEXCLN.XLL" (ByVal sheetName as Variant,
ByVal newPassword As Variant, ByVal oldPassword As Variant, ByVal server As Variant,
ByVal userName As Variant) As Long

Sub SetPassword()
Dim X As Long
'This sets the login password to password2 from password1 for the user User1 on server
Local.
X=EssVLoginSetPassword ("[Budget.xls]Sheet1", "password2", "password1", "Local",
"User1")
If X=0 then
   MsgBox("Set Password Successful.")
Else
   MsgBox("Set Password Unsuccessful.")
End If
End Sub
```

EssVPivot

Description

Transposes worksheet rows and columns, based on the selected dimension.

Syntax

```
EssVPivot(sheetName, range, startPoint, endPoint)
ByVal sheetName As Variant
ByVal range As Variant
ByVal startPoint As Variant
ByVal endPoint As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "`[Book.xls]Sheet`". If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the pivot. If *range* is Null or Empty, the whole worksheet is used.

startPoint

Range object which refers to the single cell starting point of the pivot. If *startPoint* is Null or Empty, the active cell of the worksheet is used.

endPoint

Range object which refers to the single cell ending point of the pivot. If *endPoint* is Null or Empty, the active cell of the worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVPivot Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal range
As Variant, ByVal startPoint As Variant, ByVal endPoint As Variant) As Long

Sub DoPivot()
X=EssVPivot("[Book2.xls]Sheet1", RANGE("A1:E6"), RANGE("B2"), RANGE("D1"))
If X = 0 Then
   MsgBox("Pivot successful.")
Else
   MsgBox("Pivot failed.")
End If
End Sub
```

EssVRemoveOnly

Description

Removes only the selected member(s) in the worksheet and retains unselected members in the selected dimension.

Syntax

```
EssVRemoveOnly(sheetName, range, selection)
ByVal sheetName As Variant
ByVal range As Variant
ByVal selection As Variant
```

Parameters

sheetName

Text name of the worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used. The range must include the member names and data cells. If *range* is Null or Empty, the whole worksheet is used.

selection

Range object which refers to the member(s) that are removed. If *selection* is Null or Empty, the active cell is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVRemoveOnly Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant, ByVal selection As Variant) As Long

Sub ROnly()
' Remove Only on one member name
X=EssVRemoveOnly("[Book2.xls]Sheet1", RANGE("A1:G52"), RANGE("D2"))
If X = 0 Then
   MsgBox("Remove Only successful.")
Else
   MsgBox("Remove Only failed." + X)
End If
' Remove Only on two member names
X=EssVRemoveOnly("[Book2.xls]Sheet1", RANGE("A1:G52"), RANGE("D2, A5"))
If X = 0 Then
   MsgBox("Remove Only successful.")
Else
   MsgBox("Remove Only failed." + X)
End If
End Sub
```

EssVRetrieve

Description

Retrieves data from the database and specifies locking behavior.

Syntax

```
EssVRetrieve(sheetName, range, lockFlag)
ByVal sheetName As Variant
ByVal range As Variant
ByVal lockFlag As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the retrieve. If *range* is Null or Empty, the whole worksheet is used. Usually, specifying Null is the best way to update the data in the worksheet. To specify a range in a formatted worksheet, however, *range* must be a combination of contiguous cells containing member names and data. Or you can specify a blank range of cells for Essbase to fill. The range you specify should be big enough to display all values returned.

lockFlag

Number indicating whether blocks should be locked. Table 14 indicates the lockFlag values and their actions.

Table 14   lockFlag Values and Actions

lockFlag	Action
1	Retrieves data and does not lock cells.
2	Locks the affected cells in the database and retrieves data.
3	Locks the affected cells in the database and does not retrieve data.

If lockFlag is Null or Empty, 1 is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVRetrieve Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant, ByVal lockFlag As Variant) As Long

Sub RetData()
X=EssVRetrieve("[Book2.xls]Sheet1", RANGE("A1:F12"), 1)
If X = 0 Then
   MsgBox("Retrieve successful.")
Else
   MsgBox("Retrieve failed.")
End If
End Sub
```

Note: See "EssVSendData" on page 186 for another example of EssVRetrieve.

EssVSendData

Description

Updates the database with data from the specified worksheet.

This function does not work with the EssMenuVLock function.

Syntax

```
EssVSendData(sheetName, range)
ByVal sheetName As Variant
ByVal range As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the update. If *range* is Null or Empty, the whole worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVRetrieve Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant, ByVal lockFlag As Variant) As Long

Declare Function EssVSendData Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant) As Long

Declare Function EssVUnlock Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long

Sub SendData()
X=EssVRetrieve("[Book2.xls]Sheet1", RANGE("A1:F12"), 3)
If X = 0 Then
   MsgBox("Lock successful.")
   Y=EssVSendData("[Book2.xls]Sheet1", RANGE("A1:F12"))
   If Y = 0 Then
      MsgBox("Send successful.")
   Else
      MsgBox("Send failed. Unlocking data.")
      Z=EssVUnlock("[Book2.xls]Sheet1")
      If Z = 0 Then
         MsgBox("Data unlocked. Try again.")
      Else
         MsgBox("Data not unlocked. Try again.")
      End If
   End If
End If
```

```
Else
   MsgBox("Lock failed. Cannot send data.")
End If
End Sub
```

Note: To update data on the server, you need at least Write access to the database.

EssVSetCurrency

Description

Sets Essbase currency information for the specified worksheet.

Syntax

```
EssVSetCurrency(sheetName, currencyIdentifier)
ByVal sheetName As Variant
ByVal currencyIdentifier As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

currencyIdentifier

Text name of the form:

```
CurName->CurTime->CurCategory->CurType
```

Where each item is a member name. Not all currency items must be included. If *currencyIdentifier* is Null or Empty, the currency conversion is removed.

Caution! If you specify a currency item that is an invalid member name (case-sensitive), the resulting currency information in the worksheet is not what you expected (not fully set), but no error is returned. If you open the Essbase Currency Report dialog box, the invalid item displays (none) in its list box and the Current Settings are incorrect.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVSetCurrency Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
currencyIdentifier As Variant) As Long

Sub SetCurr()
X=EssVSetCurrency(Empty, "CN$")
If X = 0 Then
```

```
      MsgBox("Currency conversion successful.")
Else
      MsgBox("Currency conversion failed.")
End If
End Sub

Sub ResetCurr()
X=EssVSetCurrency(Empty, Empty)
If X = 0 Then
      MsgBox("Currency is back to default.")
Else
      MsgBox("Currency conversion failed.")
End If
End Sub
```

EssVSetGlobalOption

Description

Sets individual workspace options.

Note: This function is not plural because you can set only one option.

Syntax

```
EssVSetGlobalOption(item, globalOption)
ByVal item As Long
ByVal globalOption As Variant
```

Parameters

item

Number indicating which option is to be set. *item* cannot be Null or Empty. Table 15 indicates which options are set for which number and the expected data type:

Table 15   Item Number Options and Expected Data Types

item	Option	Expected Data Type
1	Enable secondary button setting	Boolean
2	Enable double-clicking setting	Boolean
3	Enable FlashBack setting	Boolean
4	This setting is maintained for backward compatibility with previous Essbase releases.	Boolean
5	Specify message level setting	Number
	1 Info, Warning & Error messages	
	2 Warning & Error messages only	

item	Option	Expected Data Type
	3 Error Messages only	
	4 No messages	
6	Enable display unknown messages setting	Boolean
7	Enable route messages to log setting	Boolean
8	Enable purge log setting	Boolean
9	Enable double-clicking to browse Linked Report Objects setting	Boolean
10	Display Member Select Save dialog box setting	Boolean
11	Enable Navigate Without Data	Boolean

globalOption

A Boolean or Number value denoting the option being set for item. If *globalOption* is Null or Empty, the active worksheet value for the item is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

This example sets the option to display error messages only.

```
Declare Function EssVSetGlobalOption Lib "ESSEXCLN.XLL" (ByVal item As Long, ByVal
globalOption As Variant) As Long

Sub SetGlobal()
X=EssVSetGlobalOption(5, 3)
If X=0 Then
   MsgBox("Message level is set to 3 - Errors only")
Else
   MsgBox("Error. Message level not set.")
End If
End Sub
```

Notes:

● See "Essbase Options Dialog Box" on page 368.

● No additional parameters for EssVSetGlobalOption are added after Essbase Release 5.0.2. To set options, use "EssVSetSheetOption" on page 190.

EssVSetMenu

Description

Removes or restores the Essbase menu from Excel.

Syntax

```
EssVSetMenu(setMenu)
ByVal setMenu As Boolean
```

Parameters

setMenu

Boolean value indicating whether to remove or restore the Essbase menu for Excel.

A True value indicates that the menu should be restored. A False value indicates that the menu should be removed.

Return Value

Returns 0 if successful. Otherwise, it returns -31 if *setMenu* is True and the Essbase menu exists. It returns -30 if *setMenu* is False and the Essbase menu was removed.

Example

```
Declare Function EssVSetMenu Lib "ESSEXCLN.XLL" (ByVal setMenu As Boolean) As Long

Sub SetMyMenu()
X=EssVSetMenu(TRUE)
End Sub
```

EssVSetSheetOption

Description

Sets individual spreadsheet options.

Note: This function is not plural because you can set only one option.

Syntax

```
EssVSetSheetOption(sheetName, item, sheetOption)
ByVal sheetName As Variant
ByVal item As Variant
ByVal sheetOption As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *SheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

item

Number indicating which option is to be set. *item* cannot be Null or Empty. Table 16 indicates which options are set for which number and the expected data type.

Note: Items 21 and 31 are not used.

Table 16   Item Number Options and Expected Data Types

Item	Option	Expected Data Type and Value of sheetOption
1	Specify drill level setting 1 Next level 2 All levels 3 Bottom level 4 Sibling level 5 Same level 6 Same generation 7 Calc level	Number
2	Enable Include-selection setting	Boolean
3	Enable Within Selection Group setting	Boolean
4	Enable Remove Unselected Group setting	Boolean
5	Specify Indent setting 1 No indentation 2 Indent sub items 3 Indent totals	Number
6	Enable suppress missing setting	Boolean
7	Enable suppress zeros setting	Boolean
8	Enable suppress underscores setting	Boolean
9	Specify alias for missing text	Text
10	Enable Update mode setting (block storage databases only)	Boolean
11	Enable Retain on Retrieval formula preservation setting	Boolean
12	Enable adjust columns setting	Boolean
13	Enable alias names setting	Boolean
14	Specify alias names table setting	Text
15	Enable template retrieve mode	Boolean
16	Enable free form/Version-2.x mode	Boolean
17	Enable auto sort rows setting	Boolean
18	Enable use styles	Boolean

Item	Option	Expected Data Type and Value of sheetOption
19	Specify No Access label	Text
21	Enable Retain on Keep Only and Remove Only formula preservation setting	Boolean
22	Enable Retain on Zooms formula preservation setting	Boolean
23	Enable Formula Fill setting	Boolean
24	Enable Member Name and Alias setting	Boolean
25	Enable Repeat Member Labels setting	Boolean
26	Enable Sheet Option for Query Designer setting	Boolean
27	Enable Latest Time Period	Boolean
28	Specify Latest Time Period	Text
29	Enable Hybrid Analysis	Boolean
30	Enables metadata sampling when performing a Zoom In operation	Boolean
32	Indicates the percentage of the members to retrieve when metadata sampling is enabled	Number
33	Enables display of the qualified name of the duplicate (non-unique) member in the Excel comment box	Boolean
34	Enables display of the qualified name of the duplicate member in the Excel spreadsheet	Boolean

sheetOption

A Boolean value denoting the new value of item. *sheetOption* cannot be Null or Empty.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVSetSheetOption Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant,
ByVal item As Variant, ByVal sheetOption As Variant) As Long

Sub SetSheet()
X=EssVSetSheetOption(Null, 6, FALSE)
If X=0 Then
   MsgBox("#Missing values will appear. ")
Else
   MsgBox("Error. #Missing option not set.")
End If
End Sub
```

Notes:

● You can use the Level Constants instead of 1-7 to set the drill level (see).

● See .

● To use items 21 and 22, you must enable item 11.

● To use item 23, you must enable item 22.

● If you enable items 11, 21, or 22, items 6 and 7 are not available.

● If you enable item 22, item 4 is not available.

EssVSetStyle

Description

Sets styles information.

Syntax

```
EssVSetStyle (sheetName, styleType, dimName, item, newValue)
ByVal sheetName As Variant
ByVal styleType As Variant
ByVal dimName As Variant
ByVal item As Long
ByVal newValue As Variant
```

Parameters

sheetName

sheetName is the text name of the worksheet to perform the action. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

styleType

styleType specifies the style setting you want to set.

Table 17 styleType Style Settings

styleType	Style Setting
0	Dimension
1	Parent Members
2	Child Members
3	Shared Members
4	Read Only
5	Read/Write
6	Contains Formula

styleType	Style Setting
7	Dynamic Calculations
8	Linked Objects
11	Attributes
12	Integration Server Drill-Through

dimName

dimName is the dimension name if styleType is 0; otherwise this parameter should be set to Null.

item

item is the style you want to set.

newValue

newValue contains the new setting of item.

Table 18 Item Style Settings

Item	Meaning	newValue
1	Use style	Boolean
2	Font name	Text
3	Font size	Number
4	Bold	Boolean
5	Italic	Boolean
6	Underline	Boolean
7	Strikeout	Boolean
8	Foreground color	Number
9	Background color	Number
10	Border	Boolean

Table 19 lists foreground and background colors.

Table 19 Foreground and Background Colors

Integer	Color
1	Black
2	White
3	Red

Integer	Color
4	Lime
5	Blue
6	Yellow
7	Fuchsia
8	Aqua
9	Maroon
10	Green
11	Navy
12	Olive
13	Purple
14	Teal
15	Silver
16	Gray

Return Value

Returns 0 if successful. A negative number indicates a local failure (see). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVSetStyle Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
styleType As Variant, ByVal dimName As Variant, ByVal item As Long, ByVal newValue As
Variant) As Long

Sub SetStyle()
'This sets the parent member style to italic
X=EssVSetStyle("[Book2.xls]Sheet1",1,Empty,5,TRUE)
'This ensures the appropriate check box will be checked
'Note: If you want the Use Style check box to be checked,
'use the EssVSetSheetOption function
Y=EssVSetStyle("[Book2.xls]Sheet1",1,Empty,1,TRUE)
If X=0 And Y = 0 Then
   MsgBox("Set style successful.")
Else
   MsgBox("Set style failed.")
End If
End Sub
```

Notes

- EssVSetStyle does not remove or reset styles from the Essbase Options dialog box. You must clear previous option settings, and use EssVSetStyle.

- You must use one EssVSetStyle function for each font style. For example, if you want to apply italic and bold, use EssVSetStyle twice.

EssVUnlock

Description

Unlocks all cells on the server for the specified worksheet.

Syntax

```
EssVUnlock(sheetName)
ByVal sheetName As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVUnlock Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long

Sub UnlockData()
X=EssVUnlock("[Book2.xls]Sheet1")
If X = 0 Then
   MsgBox("Unlock successful.")
Else
   MsgBox("Unlock failed.")
End If
End Sub
```

Note: See "EssVSendData" on page 186 for another example of EssVUnlock.

EssVZoomIn

Description

Retrieves and expands data from Essbase based on the selected members.

Syntax

```
EssVZoomIn(sheetName, range, selection, level, across)
ByVal sheetName As Variant
ByVal range As Variant
```

```
ByVal selection As Variant
ByVal level As Variant
ByVal across As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form `"[Book.xls]Sheet"`. If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the zoom. If *range* is Null or Empty, the whole worksheet is used.

selection

Range object which refers to the members that are zoomed. If *selection* is Null or Empty, the active cell is used.

level

Number indicating the granularity of the zoom. Table 20 describes level numbers and actions.

Table 20 **Level Numbers and Actions**

Level	Action
1	Next level
2	All levels
3	Bottom level
4	Sibling level
5	Same level
6	Same generation
7	Calc level

If level is Null or Empty, 1 is used.

Note: You can use the Level Constants instead of 1-7 to set the zoom-in level (see).

across

Boolean value indicating whether top-level members of a dimension (for example, Products in Sample Basic) should be zoomed across. A True value indicates that the data should be displayed across while a False value indicates that the data should be displayed downward. If *across* is Null or Empty, False is used. *across* is meaningful only for top-level members, also known as dimension or title members.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVZoomIn Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal range
As Variant, ByVal selection As Variant, ByVal level As Variant, ByVal across As Variant)
As Long

Sub ZoomData()
X=EssVZoomIn("[Book2.xls]Sheet1", Null, RANGE("B3"), 1, FALSE)
If X = 0 Then
   MsgBox("Zoom successful.")
Else
   MsgBox("Zoom failed.")
End If
End Sub
```

EssVZoomOut

Description

Collapses the view of data based on the selected members.

Syntax

```
EssVZoomOut(sheetName, range, selection)
ByVal sheetName As Variant
ByVal range As Variant
ByVal selection As Variant
```

Parameters

sheetName

Text name of worksheet to operate on. *sheetName* is of the form "[Book.xls]Sheet". If *sheetName* is Null or Empty, the active worksheet is used.

range

Range object which refers to the data to be used as the source of the zoom. If *range* is Null or Empty, the whole worksheet is used.

selection

Range object which refers to the members that are zoomed out. If *selection* is Null or Empty, the active cell is used.

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssVZoomOut Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal range
As Variant, ByVal selection As Variant) As Long

Sub UnZoomData()
X=EssVZoomOut("[Book2.xls]Sheet1", Null, RANGE("B3"))
If X = 0 Then
   MsgBox("Zoom-out successful.")
Else
   MsgBox("Zoom-out failed.")
End If
End Sub
```

VBA Menu Equivalent Functions Reference

These Visual Basic functions are identical to the equivalent commands on the Essbase menu. Use the functions to perform actions as if you selected them from the menu. The requirements for the functions are the same as those for the menu commands. For example, if you must be logged in to an instance of Essbase Server to use a menu command, you must also be logged in to an instance of Essbase Server to use the equivalent Visual Basic function.

EssMenuVCalculation

Description

Calculates the active database or checks on the status of an active database calculation. This function opens the Essbase Calculation dialog box.

Syntax

```
EssMenuVCalculation()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVCalculation Lib "ESSEXCLN.XLL"() As Long

Sub MCalc()
X=EssMenuVCalculation()
End Sub
```

EssMenuVCascade

Description

Enables you to replicate worksheets using member combinations. This function opens the Essbase Cascade Options dialog box.

Syntax

```
EssMenuVCascade()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVCascade Lib "ESSEXCLN.XLL"() As Long

Sub MCascade()
X=EssMenuVCascade()
End Sub
```

EssMenuVConnect

Description

Connects to an instance of Essbase Server. This function opens the Essbase System Login dialog box.

Syntax

```
EssMenuVConnect()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVConnect Lib "ESSEXCLN.XLL"() As Long

Sub MConn()
X=EssMenuVConnect()
End Sub
```

EssMenuVCurrencyReport

Description

Enables you to perform ad-hoc currency conversions during data retrieval. This function opens the Essbase Currency Report dialog box.

Syntax

```
EssMenuVCurrencyReport()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVCurrencyReport Lib "ESSEXCLN.XLL"() As Long

Sub MCurrRpt()
X=EssMenuVCurrencyReport()
End Sub
```

EssMenuVDatalessNav

Description

Controls whether navigational operations such as Pivot, Zoom In, Zoom Out, Keep Only, and Remove Only retrieve data. A check mark next to the command in the Essbase menu indicates this feature is turned on. This command serves the same function as using Navigate without Data in the Essbase Options dialog box.

Syntax

```
EssMenuVDatalessNav()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVDatalessNav Lib "ESSEXCLN.XLL"() As Long

Sub MDatalessNav()
X=EssMenuVDatalessNav()
End Sub
```

EssMenuVDisconnect

Description

Opens the Essbase Disconnect dialog box and disconnects you from connected databases.

Syntax

```
EssMenuVDisconnect()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVDisconnect Lib "ESSEXCLN.XLL"() As Long

Sub MDisConn()
X=EssMenuVDisconnect()
End Sub
```

EssMenuVFlashBack

Description

Restores the previous view.

Syntax

```
EssMenuVFlashBack()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVFlashBack Lib "ESSEXCLN.XLL"() As Long

Sub MFlash()
X=EssMenuVFlashBack()
End Sub
```

EssMenuVKeepOnly

Description

Retains only the selected member (the active cell) or member range in the worksheet.

Syntax

```
EssMenuVKeepOnly()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVKeepOnly Lib "ESSEXCLN.XLL"() As Long

Sub MKeepOnly()
X=EssMenuVKeepOnly()
End Sub
```

EssMenuVLinkedObjects

Description

Opens the Linked Objects Browser dialog box when you select valid cells to edit linked objects.

Syntax

```
EssMenuVLinkedObjects()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVLinkedObjects Lib "ESSEXCLN.XLL"() As Long

Sub MLinkedObjects()
X=EssMenuVLinkedObjects()
End Sub
```

EssMenuVLock

Description

Locks data blocks that appear in the current worksheet. You can lock only one view.

This function does not work with the EssVSendData function.

Syntax

```
EssMenuVLock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVLock Lib "ESSEXCLN.XLL"() As Long

Sub MLock()
X=EssMenuVLock()
End Sub
```

EssMenuVMemberSelection

Description

Opens the Essbase Member Selection dialog box and enables you to select members from the multidimensional database outline.

Syntax

```
EssMenuVMemberSelection()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVMemberSelection Lib "ESSEXCLN.XLL"() As Long

Sub MMbrSel()
X=EssMenuVMemberSelection()
End Sub
```

EssMenuVOptions

Description

Enables you to select options for the active worksheet and customize the behavior of Spreadsheet Add-in software, using the Essbase Options dialog box.

Syntax

```
EssMenuVOptions()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVOptions Lib "ESSEXCLN.XLL"() As Long

Sub MOptions()
X=EssMenuVOptions()
End Sub
```

EssMenuVPivot

Description

Changes the orientation (from row to column or from column to row) of the group of members associated with the active cell.

Syntax

```
EssMenuVPivot()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVPivot Lib "ESSEXCLN.XLL"() As Long

Sub MPivot()
X=EssMenuVPivot()
End Sub
```

EssMenuVQueryDesigner

Description

Opens Query Designer.

Syntax

```
EssMenuVQueryDesigner()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVQueryDesigner Lib "ESSEXCLN.XLL"() As Long

Sub MDesigner()
X=EssMenuVQueryDesigner ()
End Sub
```

EssMenuVRemoveOnly

Description

Removes only the selected member (the active cell) or member range in the worksheet.

Syntax

```
EssMenuVRemoveOnly()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVRemoveOnly Lib "ESSEXCLN.XLL"() As Long

Sub MRemoveOnly()
X=EssMenuVRemoveOnly()
End Sub
```

EssMenuVRetrieve

Description

Retrieves data into the active worksheet, and places the data at the beginning of the active worksheet.

Syntax

```
EssMenuVRetrieve()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVRetrieve Lib "ESSEXCLN.XLL"() As Long

Sub MRetrieve()
X=EssMenuVRetrieve()
End Sub
```

EssMenuVRetrieveLock

Description

Locks the data blocks specified in the retrieval. Other users cannot update blocks you locked.

Syntax

```
EssMenuVRetrieveLock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVRetrieveLock Lib "ESSEXCLN.XLL"() As Long

Sub MRetLock()
X=EssMenuVRetrieveLock()
End Sub
```

EssMenuVSend

Description

Updates the active database on the server with data in the worksheet.

Syntax

```
EssMenuVSend()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVSend Lib "ESSEXCLN.XLL"() As Long

Sub MSend()
X=EssMenuVSend()
End Sub
```

EssMenuVUnlock

Description

Unlocks blocks that you locked

Syntax

```
EssMenuVUnlock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVUnlock Lib "ESSEXCLN.XLL"() As Long Sub MUnlock()
X=EssMenuVUnlock() End Sub
```

EssMenuVWizard

Description

Opens Retrieval Wizard.

Syntax

```
EssMenuVWizard()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVWizard Lib "ESSEXCLN.XLL"() As Long

Sub MWizard()
X=EssMenuVWizard()
End Sub
```

EssMenuVZoomIn

Description

Retrieves and expands data from Essbase according to the options specified in the Essbase Options dialog box.

Syntax

```
EssMenuVZoomIn()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVZoomIn Lib "ESSEXCLN.XLL"() As Long
```

```
Sub MZoomIn()
X=EssMenuVZoomIn()
End Sub
```

EssMenuVZoomOut

Description

Collapses the view of data according to the options specified in the Essbase Options dialog box.

Syntax

```
EssMenuVZoomOut()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
Declare Function EssMenuVZoomOut Lib "ESSEXCLN.XLL"() As Long

Sub MZoomOut()
X=EssMenuVZoomOut()
End Sub
```

Additional VBA Information

- "Creating Visual Basic Modules" on page 209
- "Using Essbase VBA Functions" on page 210
- "Connecting Excel with the Essbase API" on page 211
- "Sample Code Listing" on page 211
- "Declaring Functions" on page 216
- "Calling Functions" on page 216
- "VBA Parameters" on page 217
- "VBA Level Constants" on page 218
- "VBA Return Values" on page 218

Creating Visual Basic Modules

➤ To use the VBA functions, you must first create Visual Basic modules to contain the VBA code.

1   In Excel, select **Tools**, then **Macro**, and then **Visual Basic Editor**.

2   In the Visual Basic application, select **Insert**, and then **Module**.

A module is displayed labeled Module1 (or labeled with the next highest module number, if you inserted one or more modules).

Tip: You need the declarations (see "Declaring Functions" on page 216) in `essxlvba.txt` (in `/ESSBASE/BIN`) in order for the Essbase VBA functions to work. For convenience, copy the text of `essxlvba.txt` into another module.

Using Essbase VBA Functions

This procedure provides an example of how to use Essbase VBA functions in the spreadsheet using EssVConnect.

➤ To use Essbase VBA functions in a spreadsheet:

1 Select **View**, then **Toolbars**, and then **Forms**.

2 Select **Tools**, then **Macro**, and then **Visual Basic Editor**.

3 In the Visual Basic Editor, select **Insert**, and then **Module**.

4 Copy and paste the content of `ESSBASE/BIN/ESSXLVBA.TXT` into the module to declare all functions.

   Alternatively, you can declare only the individual function that you plan to use.

5 Select **Insert**, and then **Module**.

6 In the module, using an example from EssVConnect, enter the this VBA code for the EssVConnect function:

```
Sub Conn()X=EssVConnect(Empty, "User1", "password", "Local", "Sample", "Basic")End
Sub
```

   Substitute your user name, password, server name, database, and application.

7 From the Excel **Forms** toolbar, select ▭ to create a button.

8 In **Assign Macro**, select the name of the subroutine from the list of functions.

   In this example, select Conn.

9 Click **OK**.

   The function is now associated with the button that you just created.

10 Rename the button, if desired.

11 To run this function:

   a.   Select **Tools**, then **Macro**, and then **Macros**.

   b.   Select the function name, and then click **Run**.

   Alternatively, you can click the button that you just created.

Connecting Excel with the Essbase API

The `SAMPVBA.XLS` file (see "Sample Code Listing" on page 211) provides an example of how to use Essbase VBA functions with the Essbase VB API. This file is stored in `/ESSBASE/ CLIENT/SAMPLE` when you install Spreadsheet Add-in. To use the code sample, you need Oracle's Hyperion® Essbase® Spreadsheet Toolkit and the Essbase API modules.

Note: To successfully run a VB module that includes VB API function calls, you must include `ESBAPIN.DLL` in `/ESSBASE/BIN`.

Remember, when using the Visual Basic API inside Excel, you must use a Dim statement for each argument listed in the declarations. Do not do this for the VBA functions.

Also, you must use `ESB32.BAS` as the guideline for structures and declarations in the Essbase Visual Basic API.

`SAMPVBA.XLS` is a spreadsheet with a worksheet for each of the months from January to August, plus a Main worksheet and a SampleVBA worksheet:

- Each month worksheet is a grid of values with products on the left and states on the top.
- On the Main worksheet are buttons that, when clicked, run a subroutine:
  - ❍ **Send Data** executes the SendData subroutine.
  - ❍ **Export All** executes the GoExport subroutine.
  - ❍ **List Locks** executes the ListLocks subroutine.
- The SampleVBA worksheet is a module containing sample code.

  Note: If you use Excel to open `SAMPVBA.XLS`, you may encounter a dialog box warning you of opening macros (see "Opening Spreadsheets Containing Macros in Excel" on page 159).

To use `SAMPVBA.XLS` in your environment, you must modify the sample code to reflect your user name and server name. In each of the subroutines, change the EssVConnect function located near the beginning of the subroutine to reflect your user name, password, and server name containing the Sample Basic application.

For example, if your user name is USER1 with password PASSWORD and the server name is LOCAL, change the EssVConnect statement as follows:

```
X=EssVConnect("[SAMPVBA.XLS]", "USER1", "PASSWORD", "LOCAL", "Sample", "Basic")
```

Sample Code Listing

Here is sample VBA code from the SampleVBA worksheet of `SAMPVBA.XLS`.

Note: Declarations and other Visual Basic lines of code must appear on one line each. Where you see wrapped lines of code in this printed sample, assume that they should appear on one line, as they do in the sample file.

```
'VBA Declaration Section. See ESSXLVBA.TXT for a list of all VBA declarations.
Declare Function EssVGetHctxFromSheet Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As
Long
Declare Function EssVConnect Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
userName As Variant, ByVal password As Variant, ByVal server As Variant, ByVal
application As Variant, ByVal database As Variant) As Long
Declare Function EssVDisconnect Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant) As Long
Declare Function EssMenuVLock Lib "ESSEXCLN.XLL" () As Long
Declare Function EssVSendData Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
range As Variant) As Long
Declare Function EssVSetGlobalOption Lib "ESSEXCLN.XLL" (ByVal item As Long, ByVal
globalOption As Variant) As Long
Declare Function EssVGetGlobalOption Lib "ESSEXCLN.XLL" (ByVal item As Long) As Variant


'VB Declaration Section. See ESB32.BAS for a list of Visual Basic declarations.Declare
Function EsbExport Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ByVal AppName As String, ByVal
DbName As String, ByVal FilePath As String, ByVal Level As Integer, ByVal isColumns As
Integer) As Long
Declare Function EsbGetProcessState Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ProcState As
ESB_PROCSTATE_T) As Long
Declare Function EsbListLocks Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ByVal AppName As
String, ByVal DbName As String, pItems As Integer) As Long
Declare Function EsbGetNextItem Lib "ESBAPIN.DLL" (ByVal hCtx As Long, ByVal dType As
Integer, pItem As Any) As Long


Dim hCtx As Long
Dim sts As Long
Dim AppName As String
Dim DbName As String
Dim PathName As String
Dim Level As Integer
Dim Columns As Integer
Dim Count As Integer
Dim X As Long


Const ESB_DATA_INPUT = 3
Const ESB_STATE_DONE = 0   ' No process, or process complete
Const ESB_STATE_INPROGRESS = 1 ' Async process is in progress
Const ESB_LOCKINFO_TYPE =  ' ESB_LOCKINFO_T (ESBListLocks)
Const ESB_USERNAMELEN = 30  ' Max length of a user group
Const ESB_NO = 0
Type ESB_PROCSTATE_T
 Action  As Integer  ' current process action
 State  As Integer  ' current process state
 Reserved1  As Integer  ' reserved for future use
 Reserved2  As Long  ' reserved for future use
 Reserved3  As Long  ' reserved for future use
End Type


Type ESB_LOCKINFO_T
LoginId As Long   ' user identification tag
Time  As Long    ' maximum time held (in seconds)
nLocks As Integer   ' number of block locks held
userName As String * ESB_USERNAMELEN ' user/group name
End Type


Dim ProcState As ESB_PROCSTATE_T
```

```
Dim LockInfo As ESB_LOCKINFO_T

Sub SendData()
'Connect to each sheet of the book
'Select each sheet
'Lock and Send

'Check hCtx, a non-zero value indicates the sheet is connected. If it is zero, Connect.

   hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
      If hCtx = 0 Then
      X = EssVConnect("[SAMPVBA.XLS]Jan", "user", "password", "local", "Sample",
"Basic")
      hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
      If hCtx = 0 Then
         MsgBox ("General Error in connecting to sheet.")
         GoTo Quit
      End If
      If X <> 0 Then
         MsgBox ("Connect Failed. Error: " + Str(X))
      End If
   End If

'Get Global Options and set the message level. If level value is set to display message,
turn it off.

   X = EssVGetGlobalOption(5)
   If X < 4 Then
      X = EssVSetGlobalOption(5, 4)
   End If

'Select worksheets, perform menu lock, send data range

   Sheets("Jan").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]Jan", range("A1:Y20"))

   Sheets("Feb").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]Feb", range("A1:Y20"))

   Sheets("Mar").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]Mar", range("A1:Y20"))

   Sheets("Apr").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]Apr", range("A1:Y20"))

   Sheets("May").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]May", range("A1:Y20"))

   Sheets("Jun").Select
   X = EssMenuVLock()
   X = EssVSendData("[SAMPVBA.XLS]Jun", range("A1:Y20"))
```

```
    Sheets("Jul").Select
    X = EssMenuVLock()
    X = EssVSendData("[SAMPVBA.XLS]Jul", range("A1:Y20"))

    Sheets("Aug").Select
    X = EssMenuVLock()
    X = EssVSendData("[SAMPVBA.XLS]Aug", range("A1:Y20"))

'Logout all sheets

    X = EssVDisconnect("[SAMPVBA.XLS]Jan")
    X = EssVDisconnect("[SAMPVBA.XLS]Feb")
    X = EssVDisconnect("[SAMPVBA.XLS]Mar")
    X = EssVDisconnect("[SAMPVBA.XLS]Apr")
    X = EssVDisconnect("[SAMPVBA.XLS]May")
    X = EssVDisconnect("[SAMPVBA.XLS]Jun")
    X = EssVDisconnect("[SAMPVBA.XLS]Jul")
    X = EssVDisconnect("[SAMPVBA.XLS]Aug")

    MsgBox ("Sends Completed.")
    Sheets("Main").Select

Quit:

End Sub

Sub GoExport()

'Check hCtx, a non-zero value indicates the sheet is connected. If it is zero, Connect.

    If hCtx = 0 Then
    hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
        If hCtx = 0 Then
        X = EssVConnect("[SAMPVBA.XLS]Jan", "user", "password", "local", "Sample",
"Basic")
        hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
        If hCtx = 0 Then
           MsgBox ("General Error in connecting to sheet.")
        GoTo Quit
        End If
        If X <> 0 Then
           MsgBox ("Connect Failed. Error: " + Str(X))
        End If
      End If
    End If

AppName = "Sample"
DbName = "Basic"

PathName = "c:\export.txt"
Level = ESB_DATA_INPUT
Columns = ESB_NO

'Export it

sts = EsbExport(hCtx, AppName, DbName, PathName, Level, Columns)
If sts <> 0 Then
```

```vba
MsgBox ("Export Failed. Error " + Str$(sts))
End If

'Check Process State until Done

   sts = EsbGetProcessState(hCtx, ProcState)
   Do While ProcState.State = ESB_STATE_INPROGRESS
      sts = EsbGetProcessState(hCtx, ProcState)
   Loop

   If sts = 0 Then
   Sheets("MAIN").Select
   MsgBox ("Export Completed.")
   Else
   MsgBox ("Export failed.")
   End If

Quit:

End Sub

Sub ListLocks()

'Check hCtx, a non-zero value indicates the sheet is connected. If it is zero, Connect.

   If hCtx = 0 Then
   hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
         If hCtx = 0 Then
         X = EssVConnect("[SAMPVBA.XLS]Jan", "user", "password", "local", "Sample",
"Basic")
         hCtx = EssVGetHctxFromSheet("[SAMPVBA.XLS]Jan")
         If hCtx = 0 Then
            MsgBox ("General Error in connecting to sheet.")
         GoTo Quit
         End If
         If X <> 0 Then
            MsgBox ("Connect Failed. Error: " + Str(X))
         End If
      End If
   End If

   AppName = "Sample"
   DbName = "Basic"

   sts = EsbListLocks(hCtx, AppName, DbName, Count)
   If Count = 0 Then
   MsgBox ("No Locks Exist")
   GoTo Quit
   End If
   For n = 1 To Count
      sts = EsbGetNextItem(hCtx, ESB_LOCKINFO_TYPE, LockInfo)
      MsgBox ("Lock # " + Str$(n) + " owned by " + Trim(LockInfo.userName))
      MsgBox ("Number of Locks " + Str$(LockInfo.nLocks))
      MsgBox ("Elapsed Locked Time of " + Str$(LockInfo.Time) + " seconds.")
      MsgBox ("Login ID of " + Str$(LockInfo.LoginId))
   Next
```

```
Quit:

End Sub
```

Declaring Functions

Before you can use the Essbase Visual Basic functions in an Excel module, you must declare them at the top of the module. A declaration outlines the necessary elements of the function so Visual Basic can run it. You can declare only those functions you plan to use, or you can declare all Essbase VBA functions.

➤ To declare all Essbase VBA functions:

1 **Move the cursor to the top of the module.**

2 **Select Insert, and then File.**

3 **In Insert File , select** /ESSBASE/BIN/ESSXLVBA.TXT.

The file is copied into the module. Now you can use the Essbase Excel VBA function in your program. Delete declarations for functions that you do not need in your module.

➤ To declare individual Essbase VBA functions:

1 **Move the cursor to the top of the module.**

2 **Enter the declarations for the functions you are using.**

See the description of each function for its declaration, or see ESSXLVBA.TXT. For example:

```
Declare Function EssVCalculate Lib "ESSEXCLN.XLL" (ByVal sheetName As Variant, ByVal
calcScript As Variant, ByVal synchronous As Variant) As Long
```

Notes:

When typing the declaration, observe these guidelines:

- Do not substitute values for parameter names. In the EssVCalculate example, the first parameter is sheetName. In the declaration, you enter it as sheetName. When you call the EssVCalculate function in your VBA module, you substitute the name of the worksheet.

- Enter the declaration on one line.

Calling Functions

After the functions are declared at the top of the module, you can call them in your VBA code. When you call a function, you tell it to perform its intended action and return a value. You can test the returned value to see if the function ran successfully.

This example shows the syntax for EssVCalculate.

```
EssVCalculate(sheetName, calcScript, synchronous)
```

When you call a function, observe these guidelines:

- Substitute the value for each parameter, shown in italics.

- Enter a value for every parameter. All parameters are required. If you do not want to specify a value for a parameter, enter Null or Empty so that Essbase uses the default value for that parameter.

- Assign the function to a variable. After the function runs, the variable stores the return value, which indicates the success or failure of the function.

```
CalcRes=EssVCalculate("[Book.xls]Sheet", "[Default]", False)
```

VBA Parameters

Most of the Visual Basic functions require that you supply one or more parameters. Parameters define what to operate on and how to perform the function. Table 21 lists the parameter types and how to supply a value for each type:

Table 21   VBA Parameters

Parameter Type	Values
Text	A word or phrase or name in quotes. For example: "Essbase" "[Book2.xls]Sheet1"
Boolean	True False
Range Object	A cell, row or column, one or more selections of cells, or a three-dimensional range address, surrounded by quotes. For example: RANGE("A1") RANGE("A1:B2") RANGE("A1:B2") RANGE("G:G,I:I,K:K") RANGE("A1:B5,C1:C10,D5:L8") RANGE("Sheet1!C3:R20,Sheet2!C3:R20")
Number	A number without quotes and without commas. For example: 1 2.5 50000
List of Strings	A list of Text values, separated by commas. For example: "Qtr1", "Actual", "Oregon"
Constant	A predefined constant from ESSXLVBA.TXT.
Default Value	Null Empty If you do not want to specify a value for a parameter, you can use Null or Empty. Every parameter has a default value or behavior that the function uses if you specify Null or Empty. See the description of each function for information on the default values of each parameter.

VBA Level Constants

Table 22 lists the constants defined in ESSXLVBA.TXT. You can use them in functions, such as EssVGetMemberInfo and EssVZoomIn, that require you to specify an outline level as a parameter.

Table 22   VBA Level Constants

Constant	Value	Description
EssChildLevel	1	Next level
EssDescendentLevel	2	All levels
EssBottomLevel	3	Bottom level
EssSiblingLevel	4	Sibling level
EssSameLevel	5	Same level
EssSameGenerationLevel	6	Same generation
EssCalculationLevel	7	Calc level
EssParentLevel	8	Previous or parent level
EssDimensionLevel	9	Dimension member belongs to

VBA Return Values

The Essbase Visual Basic functions and the extended spreadsheet macros return values indicating the success or failure of the function. The functions return these types of values:

- **0 (zero)**—Function was successful. Note that a function can run successfully but return undesirable results.

- **1**—Typically means the user pressed Esc or clicked Cancel from a dialog box.

- **Negative number**—Function failed due to a problem with the client computer, a problem with the syntax, or a problem with the local environment.

- **Large positive number**—Function failed due to a problem originating on the server, such as Essbase Server not running or an invalid user name.

Table 23 lists the return values for local problems, represented by negative numbers.

Table 23   VBA Return Values

Return Value	Meaning
0	The function ran successfully.
-1	Initialization error. Call Technical Support.
-2	Termination error. Call Technical Support.

Return Value	Meaning
-3	Initialization error. Call Technical Support.
-4	The spreadsheet is not yet connected to the server.
-6	The spreadsheet is unstable. Call Technical Support.
-7	The spreadsheet is unstable. Call Technical Support.
-8	No FlashBack information exists.
-9	The operation is canceled.
-12	FlashBack is not enabled.
-13	Not enough memory resources are available.
-14	The Essbase dialog box cannot be displayed. Call Technical Support.
-15	The function contains an invalid parameter.
-16	A calculation is in progress.
-17	A SQL Drill-Through operation is in progress.
-18	The operation is not allowed because the spreadsheet is in formula-preserve mode.
-19	The operation cannot take place on the specified sheet.
-20	The current sheet cannot be determined.
-21	You did not specify a spreadsheet name and no sheet is active.
-22	You cannot cancel a calculation because no calculation is running.
-23	The selection parameter is invalid.
-25	The cascade list file cannot be created, or you are attempting to cascade while the spreadsheet is embedded in another document.
-26	You cannot run the spreadsheet macros due to a licensing constraint.
-27	You cannot run the spreadsheet macros which update the database due to a licensing constraint.
-28	You cannot update the database because the database license is read-only.
-29	You are not licensed to use SQL Drill-Through.
-30	The menu is removed.
-31	The menu is added.

Essbase Macros

-

Using Essbase Macros

When using macros, you must first insert a macro worksheet into the workbook. Follow these steps for an example of how to use the Essbase macro EssConnect.

Note: When using macros, ensure that the worksheet contains only the macros. The macros do not work on worksheets containing other information. Oracle recommends using the VBA equivalent functions of Essbase macros whenever possible.

➤ To run Essbase macros:

1   In Excel, select a worksheet tab in the workbook.

2   Right-click the worksheet tab, and select **Insert**.

3   In **Insert**, select   MS Excel 4.0 Macro   , and then click **OK**.

Excel creates a worksheet name called Macro 1 to the left of the selected worksheet in the active workbook.

4   Next to the formula bar, click **Insert Function**, *fx*.

5   In **Or select a category**, select **Essbase Add-in**.

6   Select a function; for example, EssConnect.

7   Click **OK**.

A dialog box for filling in the parameters for the EssConnect macro is displayed.

8   Enter the information, and then click **OK**.

9   In the cell directly below the macro, enter =RETURN().

10 To run this macro:

   a.   Select the cell in which the macro is located.

   b.   Select **Tools**, then **Macro**, and then **Macros**.

   c.   Click **Run**.

   Note: To associate a button with a macro, draw a button using the ⬜ from the Excel Forms toolbar. To view the Forms toolbar, select View, then Toolbars, and then Form. In the Assign Macro dialog box, enter EssConnect in the Macro Name box. Click Run.

Essbase Macro Reference

Consult the Contents pane for an alphabetical listing of Essbase macros.

EssCalculate

Description

Initiates a calculation on the server.

Syntax

EssCalculate([*workbookName*]*sheetName*, *calcScript*, *synchronous*)

Where *[workbookName]sheetName* is the text name of the workbook and worksheet from which the connection information is used.

calcScript is the text name of the calculation object to calculate. This object must exist on the server.

synchronous is a logical value that determines whether the calculation is performed synchronously or asynchronously. A value of TRUE indicates that the script is run synchronously, FALSE indicates asynchronous processing.

Example

=EssCalculate("[Sample.xls]Sheet1","Default.CSC",FALSE)

Notes:

- The active worksheet is used when the *sheetName* parameter is missing.
- The default calculation script is used when the *calcScript* parameter is missing.
- The value TRUE is assumed when the *synchronous* parameter is missing.

EssCancelCalc

Description

Cancels the calculation being run on the server.

Syntax

EssCancelCalc(*[workbookName]sheetName*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet containing the connection information.

Example

=EssCancelCalc("[Sample.xls]Sheet1")

Notes:

- The active worksheet is used when the *sheetName* parameter is missing.
- You cannot cancel synchronous calculations.

EssCascade

Description

Cascades on the selection, generating multiple worksheets.

Syntax

EssCascade(*[workbookName]sheetName*, *range*, *selection*, *path*, *prefix*, *suffix*, *level*, *open*, *copy*, *overwrite*, *listFile*)

Where *[workbookName]sheetName* is the text name of the source workbook and worksheet.

range is a reference to the area of data to be retrieved.

selection is a reference to the selected members.

path is a text item that indicates the destination of the worksheets generated.

prefix is a text item placed before the names of the generated worksheets.

suffix is a text item placed after the names of the generated worksheets.

level is a number that indicates the granularity of the cascade. The level numbers and associated actions are shown in Table 24.

Table 24   Level Numbers and Actions

Level	Action
1	Cascade to next level (children).
2	Cascade to all levels (descendants).
3	Cascade to the lowest level(bottom).
4	Cascade using siblings.
5	Cascade to same level.
6	Cascade to same generation.
7	Cascade to calculation script.

open is a logical value that determines whether the generated worksheets should be opened after creation. A value of TRUE indicates that the spreadsheet should be opened; FALSE indicates that the spreadsheet should not be opened.

copy is a logical value that determines whether the formatting information of the parent spreadsheet is used in the creation of the new spreadsheet. A value of TRUE indicates that the

newly-created spreadsheet inherits the formatting of its parent; FALSE means no formatting is copied.

overwrite is a logical value that determines whether newly-created spreadsheets can overwrite previously saved spreadsheets. A value of TRUE means the user is not prompted when an overwrite occurs; a value of FALSE indicates that the user is given a chance to rename the spreadsheet.

listFile is a logical value that determines whether a report of the cascade is created. A value of TRUE means a listFile is created in the path with the name `prefix0suffix.lst`.

Example

```
=EssCascade("[Sample.xls]Sheet1",SAMPLE.XLS!A1:G20,SAMPLE.XLS!B2,
"C:\ESSBASE\CLIENT\SAMPLE",,,1,FALSE,TRUE,FALSE,TRUE)
```

Notes

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.
- The active cell is used when the *selection* parameter is missing.
- The spreadsheet directory is used when the *path* parameter is missing.
- A value of 1 is assumed when the *level* parameter is missing.
- The value FALSE is assumed when *open* is missing. If too many spreadsheets are opened, Excel can run out of memory, causing unexpected results.
- The value TRUE is assumed when the *copy* parameter is missing.
- The value TRUE is assumed when the *overwrite* parameter is missing.
- The value FALSE is assumed when the *listFile* parameter is missing.

EssCell

Description

Returns the value represented by a data point as determined by the member items.

Syntax

EssCell (*Membername*)

Where *Membername* is the name of a member in the database.

Example

=EssCell ("Year")

Notes:

- The active spreadsheet is used. If a worksheet is not logged in, the return value is #N/A.
- Up to 20 members, each from another dimension, can be specified.

- If not all members are specified, members from those dimensions not represented uses the top level member name.

- If a member name is invalid, the return value is #VALUE.

EssConnect

Description

Logs in to a server, application, and database combination.

Syntax

EssConnect([*workbookName*]*sheetName*, *username*, *password*, *server*, *application*, *database*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to be connected.

username is the text name of a user on the server.

password is a password for this user.

server is the text name of the server to which the connection occurs.

application is the text name of the application to which the connection occurs.

database is the text name of the database to which the connection occurs.

Example

```
=EssConnect("[Sample.xls]Sheet1","Supervisor","Password",
"Server1","Sample","Basic")
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.

- If a parameter (other than *sheetName*) is missing, the Essbase System Login dialog box is displayed.

EssDisconnect

Description

Logs out from the server.

Syntax

EssDisconnect([*workbookName*]*sheetName*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to disconnect.

Example

```
=EssDisconnect("[Sample.xls]Sheet1")
```

Note: The active spreadsheet is used when the *sheetName* parameter is missing.

EssFlashBack

Description

Restores your view of the database to the previous view.

Syntax

```
EssFlashBack([workbookName]sheetName)
```

Where *[workbookName]sheetName* is the text name of the workbook and worksheet to flash back.

Example

```
=EssFlashBack("[Sample.xls]Sheet1")
```

Note: The active spreadsheet is used when the *sheetName* parameter is missing.

EssGetCurrency

Description

Gets Essbase currency information from the specified spreadsheet.

Syntax

```
EssGetCurrency([workbookName]sheetName)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet where the currency information is obtained.

Example

```
=EssGetCurrency("[Sample.xls]Sheet1")
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- EssGetCurrency returns the active currency setting. For example, if the active currency setting is Canadian dollars, Essbase returns (CN$).

EssGetDataPoint

Description

Gets member information for a given data cell.

Syntax

`EssGetDataPoint([`*`workbookName`*`]`*`sheetName`*`, `*`Cell`*`, `*`Range`*`, `*`Aliases`*`, `*`Destination`*`)`

Where *sheetName* is the text name of the worksheet where the currency information is obtained.

Cell is the data cell to return member information from.

Range is a reference to the area of data to use to determine the member combination.

Aliases is a Boolean value that indicates whether alias names are returned.

Destination is the range of cells where you want to display the results.

Example

`=EssGetDataPoint("[Samp.xls]Sheet1", C1, Sheet1!A1:G20, TRUE,B1)`

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The active cell is used when the *Cell* parameter is missing.
- The active range is used if the *Range* parameter is missing.

EssGetGlobalOption

Description

Gets individual Essbase workspace options.

Syntax

`EssGetGlobalOption(`*`item`*`)`

Where *item* is a number that specifies what type of information you want. The item argument, return value, and return value type are shown in Table 25.

Table 25   Item Argument, Return Value, and Return Value Type

Item	Return Value	Type
1	Enable secondary button setting	Boolean
2	Enable double-clicking setting	Boolean
3	Enable FlashBack setting	Boolean
4	This setting is maintained for backward compatibility with previous Essbase releases.	Boolean

Item	Return Value	Type
5	Specify message level setting: ● 1 Info, Warning & Error messages ● 2 Warning & Error messages only ● 3 Error messages only ● 4 No messages	Number
6	Enable display unknown members setting	Boolean
7	Enable route messages to log setting	Boolean
8	Enable purge log setting	Boolean
9	Enable double-clicking to browse Linked Objects setting	Boolean
10	Display Member Select Save Dialog Box setting	Boolean
11	Enable Navigate Without Data	Boolean

Example

```
=EssGetGlobalOption(3)
```

returns TRUE if FlashBack is enabled or FALSE if it is not.

Note: The value #NUM! is returned when *item* is missing or is not number 1 through 11.

EssGetMemberInfo

Description

Gets information about member relationships.

Syntax

```
EssGetMemberInfo([workbookName]sheetName, MemberName, Action, Aliases, Destination)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet where the options are set.

MemberName is the text name for a member for which information is retrieved.

Action is a number that specifies the type of relationship you want. The action arguments and return values are shown in Table 26.

Table 26   Action Arguments and Return Values

Action	Return Value
1	Next or child level
2	All or descendent level

Action	Return Value
3	Bottom or leaf level
4	Sibling level
5	Same level
6	Same generation level
7	Calculation level
8	Previous or parent level
9	Dimension member belongs to

Aliases is a Boolean value that indicates whether alias names are returned.

Destination is the range of cells where you want to display the results.

Example

```
=EssGetMemberInfo("[Sample.xls]Sheet1","Year",1,TRUE,B1)
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- A value of 1 is used if *Action* is missing.
- The value of FALSE is assumed if *aliases* is Null or Empty.

EssGetSheetOption

Description

Gets individual Essbase spreadsheet options.

Syntax

```
EssGetSheetOption([workbookName]sheetName, item)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet where the options operate.

item is a number that specifies the type of information you want. The item argument, return value, and return value type are shown in Table 27.

Table 27 Item Arguments, Return Values, and Return Value Types

Item	Return Value	Type
1	Specify drill level setting	Number
2	Enable Include Selection setting	Boolean

Item	Return Value	Type
3	Enable Within Selection Group setting	Boolean
4	Enable Remove Unselected Group setting	Boolean
5	Specify Indent setting	Number
6	Enable Suppress Missing setting	Boolean
7	Enable Suppress Zeros setting	Boolean
8	Enable Suppress Underscores	Boolean
9	Specify Alias for Missing label setting	Text
10	Enable Update mode setting (block storage databases only)	Boolean
11	Enable Retain on Retrieval formula preservation setting	Boolean
12	Enable Adjust Columns setting	Boolean
13	Enable Use Alias setting	Boolean
14	Specify Alias Name Table setting	Text
15	Enable Template Retrieve mode	Boolean
16	Enable Free Form/Version 2.x mode	Boolean
17	Enable Auto Sort Rows setting	Boolean
18	Enable Use Styles	Boolean
19	Specify No Access Alias setting	Text
21	Enable Retain on Keep Only and Remove Only formula preservation setting	Boolean
22	Enable Retain on Zooms formula preservation setting	Boolean
23	Enable Formula Fill setting	Boolean
24	Enable Member Names and Alias setting	Boolean
25	Enable Repeat Member Labels setting	Boolean
26	Enable Sheet Options for Query Designer setting	Boolean
27	Enable Latest Time Period	Boolean
28	Specify Latest Time Period	Text
29	Enable Hybrid Analysis	Boolean
30	Enables metadata sampling when performing a Zoom In operation	Boolean
32	Indicates the percentage of the members to retrieve when metadata sampling is enabled	Number

Item	Return Value	Type
33	Enables display of the qualified name of the duplicate (non-unique) member in the Excel comment box	Boolean
34	Enables display of the qualified name of the duplicate member in the Excel spreadsheet	Boolean

Note: Items 20 and 31 are not used.

Example

```
=EssGetSheetOption("[Sample.xls]Sheet1",10)
```

returns TRUE if the worksheet is in Update mode or FALSE if it is not.

Notes:

- Essbase uses the active spreadsheet when the *sheetName* parameter is missing.
- Essbase returns the value #NUM! when *item* is missing or is out of range.

EssGetStyle

Description

Retrieves styles information.

Syntax

```
EssGetStyle([workbookName]sheetName, styleType, dimName, item)
```

Where [*workbookName*]*sheetname* is the text name of the workbook and worksheet from which to retrieve style information.

styleType specifies the style setting you want to get, as shown in Table 28.

Table 28   Style Types and Settings

styleType	Style Setting
0	Dimensions
1	Child Members
2	Parent Members
3	Shared Members
4	Read Only
5	Read/Write
6	Contains Formula
7	Dynamic Calculations

styleType	Style Setting
8	Linked Objects
11	Attributes
12	Integration Server Drill-Through

dimName is the dimension name if styleType is 0; otherwise this parameter should be set to Null.

item is the style you want to get, as shown in Table 29.

Table 29   Item Meanings and Return Types

Item	Meaning	Return Type
1	Use style	Boolean
2	Font name	Text
3	Font size	Number
4	Bold	Boolean
5	Italic	Boolean
6	Underline	Boolean
7	Strikeout	Boolean
8	Foreground color	Number
9	Background color	Number
10	Border	Boolean

Foreground and background colors are shown in Table 30.

Table 30   Foreground and Background Colors

Integer	Color
1	Black
2	White
3	Red
4	Lime
5	Blue
6	Yellow
7	Fuchsia
8	Aqua

Integer	Color
9	Maroon
10	Green
11	Navy
12	Olive
13	Purple
14	Teal
15	Silver
16	Gray

Example

```
=EssGetStyle("[Sample.xls]Sheet1",1,,5)
```

EssKeepOnly

Description

Performs a Keep Only on the selection range.

Syntax

```
EssKeepOnly([workbookName]sheetName, range, selection)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieve occurs.

range is reference to the area of data that is retrieved.

selection is a reference to the members in a dimension which are included in the retrieve. Those members not included from a dimension are excluded from the retrieval.

Example

```
=EssKeepOnly("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20, SAMPLE.XLS!B2)
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.
- The active cell of *sheetName* is used when the *selection* parameter is missing.

EssPivot

Description

Pivots the selected dimension.

Syntax

EssPivot([*workbookName*]*sheetName*, *range*, *start*, *end*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieve occurs.

range is a reference to the area of data to be retrieved.

start is one cell reference indicating the dimension to be pivoted.

end is one cell reference indicating the destination of the dimension selected by start.

Example

=EssPivot("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20, SAMPLE.XLS!B4, SAMPLE.XLS!C1)

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.
- The current cell is used when the *start* parameter is missing.
- The current cell is used when the *end* parameter is missing.

EssRemoveOnly

Description

Performs a Remove Only on the selection range for the dimension whose members you selected.

Syntax

EssRemoveOnly([*workbookName*]*sheetName*, *range*, *selection*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieve occurs.

range is reference to the area of data that is retrieved.

selection is a reference to the members in a dimension which are to be removed in the retrieve.

Example

=EssRemoveOnly("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20, SAMPLE.XLS!B2)

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.

- The contents of *sheetName* is used when the *range* parameter is missing.
- The active cell of *sheetName* is used when the *selection* parameter is missing.

EssRetrieve

Description

Retrieves data from the database. You can specify locking behavior.

Syntax

EssRetrieve([*workbookName*]*sheetName*, *range*, *lock*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieve occurs.

range is a reference to the area of data that is retrieved.

lock is a number from 1 to 3 which specifies whether the database should lock the blocks and whether the spreadsheet should be updated. The lock arguments and associated actions are shown in Table 31.

Table 31   Lock Arguments and Actions

Lock	Action
1	Does not lock cells. Only a retrieve is performed. (Retrieve)
2	Locks the affected cells in the database and performs a retrieve. (Retrieve & Lock)
3	Locks the affected cells in the database but does not perform a retrieve. (Lock)

Example

=EssRetrieve("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20,2)

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.
- The number 1 (Retrieve) is assumed when the *lock* parameter is missing.

EssSendData

Description

Updates the database with data from the specified spreadsheet or spreadsheet range.

Syntax

EssSendData([*workbookName*]*sheetName*, *range*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet from which the data is sent.

range is a reference to the area of data.

Example

```
=EssSendData("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20)
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.

EssSetCurrency

Description

Sets Essbase currency information for the specified spreadsheet.

Syntax

```
EssSetCurrency([workbookName]sheetName, currencyIdentifier)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet where the information is retrieved.

currencyIdentifier is the text name of the form:

```
CurName->CurTime->CurCategory->CurType
```

Not all currency items must be included. For example, here is one currency identifier:

```
 "Qtr1->Yen"
```

Example

```
=EssSetCurrency("[Sample$.xls]Sheet1", "FEB->STERLING")
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The currency conversion is removed when the *currencyIdentifier* parameter is missing.

EssSetGlobalOption

Description

Sets individual workspace options.

Syntax

```
EssSetGlobalOption (item, option)
```

item is a number that specifies which option you want to set. The item number, description, and data type are shown in Table 32.

Table 32   Item Descriptions and Data Types

Item	Description	Data Type
1	Enable secondary button setting	Boolean*
2	Enable double-clicking setting	Boolean*
3	Enable FlashBack setting	Boolean*
4	This setting is maintained for backward compatibility with previous Essbase releases.	Boolean*
5	Specify Message Level setting ● 1 Info, Warning & Error messages ● 2 Warning & Error messages only ● 3 Error messages only ● 4 No messages	Number
6	Enable Display Unknown member message setting*	Boolean
7	Enable route messages to log setting	Boolean*
8	Enable purge log setting	Boolean*
9	Enable double-clicking to browse Linked Reporting Objects setting	Boolean
10	Display Member Select Save dialog box setting	Boolean
11	Enable Navigate Without Data	Boolean

option is the value set for the item. When specifying *option*, use the type listed in Table 32 next to the item you are setting.

Example

```
=EssSetGlobalOption (3,TRUE)
```

enables the FlashBack option.

Notes:

● The value ERR is returned when *item* is missing or is out of range.

● You must place quotes around all string arguments and NULL. Do not place quotes around numeric parameters (for example, 1).

EssSetGlobalOptions

Description

Sets individual workspace options.

Syntax

`EssSetGlobalOptions(`*`rightMouse, doubleClick, flashBack, mbrSelect, messageLevel, displayUnknowns, createLog, purgeLog, enableLRO, displaySaveDialog, enableDataLessNav`*`)`

Where *rightMouse* is a logical value specifying whether the right mouse button is enabled and interpreted by Essbase.

doubleClick is a logical value specifying whether double-clicking is enabled and interpreted by Essbase.

flashBack is a logical value specifying whether FlashBack is enabled.

mbrSelect is maintained for backward compatibility with previous Essbase releases.

messageLevel is a number specifying the level of error reporting that the user sees on the screen. The messageLevel parameters and associated action are shown in Table 33.

Table 33   Message Levels and Actions

Message Level	Action
1	Display error, warning and information messages.
2	Display error and warning messages.
3	Display error messages.
4	Display no messages.

displayUnknowns is a logical value specifying whether Essbase displays a message each time the server encounters an unrecognized token.

createLog is a logical value specifying whether a log file should be created to capture messages coming from the server. If a value of TRUE is specified, ALL error messages are placed into the log file. A value of FALSE means NO error messages are saved. The log file created is `c:/essbase/message.log` where `c:/essbase` is the path name defined in the ARBORPATH environment variable. (If your system uses another ARBORPATH setting, Essbase creates the log file in that directory).

purgeLog is a logical value specifying whether to purge the log file and start fresh after a session.

enableLRO is a logical value specifying whether double-clicking is enabled to access LROs.

displaySaveDialog is a logical value specifying whether to prompt you to save a member selection object in the Essbase Member Selection dialog box.

enableDataLessNav is a logical value specifying whether to turn Navigate Without Data on or off.

Example

`=EssSetGlobalOptions(TRUE,TRUE,TRUE,FALSE,2,TRUE,TRUE,TRUE,TRUE,TRUE)`

Notes:

- No additional parameters for EssSetGlobalOptions are added after Essbase Release 5. Use EssSetGlobalOption to set options individually.

- When a parameter is missing, the active worksheet value of that parameter is used, and no error is returned.

EssSetMenu

Description

Removes or restores the Essbase menu from Excel.

Syntax

EssSetMenu(*SetMenu*)

Where *SetMenu* is a Boolean value that specifies whether the Essbase menu should be added or removed from Excel.

Example

=EssSetMenu(TRUE)

Note: A TRUE value indicates that the menu should be restored, A FALSE value indicates that the menu should be removed.

EssSetSheetOption

Description

Sets individual Essbase spreadsheet options.

Syntax

EssSetSheetOption([*workbookName*]*sheetName*, *item*, *option*)

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet where *option* is set.

item is a number that specifies the setting you want. The item arguments, description, and expected data types are shown in Table 34.

Table 34   Item Return Values and Types

Item	Return Value	Type
1	Specify Drill Level setting	Number
2	Enable Include Selection setting	Boolean
3	Enable Within Selection Group setting	Boolean

Item	Return Value	Type
4	Enable Remove Unselected Groups setting	Boolean
5	Specify Indent setting	Number
6	Enable Suppress Missing setting	Boolean
7	Enable Suppress Zeros setting	Boolean
8	Enable Suppress Underscores setting	Boolean
9	Specify Alias for Missing label setting	Text
10	Enable Update mode setting (block storage databases only)	Boolean
11	Enable Retain on Retrieval formula preservation setting	Boolean
12	Enable Adjust Columns setting	Boolean
13	Enable Alias Names setting	Boolean
14	Specify Alias Name Table setting	Text
15	Enable Template Retrieve mode	Boolean
16	Enable Free Form/Version 2.x mode	Boolean
17	Enable Auto Sort Rows setting	Boolean
18	Enable Use Styles	Boolean
19	Specify No Access Alias setting	Text
21	Enable Retain on Keep Only and Remove Only formula preservation setting	Boolean
22	Enable Retain on Zooms formula preservation setting	Boolean
23	Enable Formula Fill	Boolean
24	Enable Member Names and Alias setting	Boolean
25	Enable Repeat Member Labels setting	Boolean
26	Enable Sheet Options for Query Designer setting	Boolean
27	Enable Latest Time Period	Boolean
28	Specify Latest Time Period	Text
29	Enable Hybrid Analysis	Boolean
30	Enables metadata sampling when performing a Zoom In operation	Boolean
32	Indicates the percentage of the members to retrieve when metadata sampling is enabled	Number
33	Enables display of the qualified name of the duplicate (non-unique) member in the Excel comment box	Boolean

Item	Return Value	Type
34	Enables display of the qualified name of the duplicate member in the Excel spreadsheet	Boolean

Note: Items 20 and 31 are not used.

option is the value set for the item. When specifying *option*, use the type listed in Table 34 next to the item you are setting.

Example

```
=EssSetSheetOption ("[Sample.xls]Sheet1",10,TRUE)
```

puts the worksheet in Update mode.

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- To use items 21 and 22, you must enable item 11.
- To use item 23, you must enable item 22.
- If you enable items 11, 21, or 22, items 6 and 7 are not available.
- If you enable item 22, item 4 is not available.

EssSetSheetOptions

Description

Sets spreadsheet options.

Syntax

```
EssSetSheetOptions([workbookName]sheetName, drillLevel, includeSelection,
selectionOnly, onlyMode, indent, suppressMissing, suppressZeros, suppressUnderscores,
missingAlias, updateMode, preserveFormulas, adjustColumns, autoSortRows, alternateNames,
altNameTable, templateRetrieve, version2x)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet in which the options occurs.

drillLevel is a number that indicates the zoom level used for reporting. The *drillLevel* parameters and associated action are shown in Table 35.

Table 35   Drill Level Parameters and Actions

Drill Level	Action
1	Zoom In to next level (children).
2	Zoom In to all levels (descendants).

Drill Level	Action
3	Zoom In to the lowest level (bottom).
4	Zoom In using siblings.
5	Zoom In to same level.
6	Zoom In to same generation.
7	Zoom In to calculation script.

includeSelection is a logical value specifying whether to include the item being zoomed in upon in the report.

selectionOnly is a logical value specifying whether a zoom or keep only operation affects every identical member or only the member selected.

onlyMode is a logical value specifying whether to "Remove Unselected Groups." If TRUE, all dimension groups that are not in the selected group are removed. This option is not available if you select the "Retain on Zooms" mode option.

indent is a number that indicates the indentation level used for reporting:

Indent Value	Action
1	No indentation.
2	Sub-items are indented.
3	Totals are indented.

suppressMissing is a logical value specifying whether rows containing only #Missing values should be reported.

suppressZeros is a logical value specifying whether rows containing only zero values should be reported.

suppressUnderscores is a logical value specifying whether underscore characters in member names should be converted to spaces.

missingAlias is a text value which is used in reporting for replacement of #Missing.

updateMode is a logical value specifying whether every retrieval locks the associated blocks at the database.

preserveFormulas is a logical value specifying whether formulas are preserved.

adjustColumns is a logical value specifying whether column widths should be adjusted after a retrieval.

autoSortRows is a logical value specifying whether members in data rows are sorted in database Outline order. The value of templateRetrieve or version2x (or both) must be TRUE for this setting to take effect.

alternateNames is a logical value specifying whether alternate names should be sent back by the server.

altNameTable is a text value specifying which alternate names table to use on the server.

templateRetrieve is a logical value specifying template retrieve mode.

version2x is a logical value specifying whether to report using Version 2.x compatibility mode.

Example

```
=EssSetSheetOptions("[Sample.xls]Sheet1",2,TRUE,FALSE,FALSE,TRUE,TRUE,
TRUE,TRUE,"0",FALSE,TRUE,TRUE,TRUE,"DEFAULT",FALSE,FALSE)
```

Notes:

- No additional parameters for EssSetSheetOptions are added after Essbase Release 5. Use EssSetSheetOption to set options individually.

- The active spreadsheet is used when the *sheetName* parameter is missing.

- When a parameter is missing, the active worksheet value of that parameter is used, and no error is returned.

EssSetStyle

Description

Sets styles information.

Syntax

```
EssSetStyle([workbookName]sheetName, styleType, dimName, item, newValue)
```

Where [*workbookName*]*sheetname* is the text name of the workbook and worksheet to perform the action.

styleType specifies the style setting you want to set, as shown in Table 36.

Table 36   styleType Values and Settings

styleType	Style Setting
0	Dimensions
1	Child Members
2	Parent Members
3	Shared Members
4	Read Only
5	Read/Write
6	Contains Formula
7	Dynamic Calculations

styleType	Style Setting
8	Linked Objects
11	Attributes
12	Integration Server Drill-Through

dimName is the dimension name if *styleType* is 0; otherwise this parameter should be set to Null.

item is the style you want to set.

newValue contains the setting of item, as shown in Table 37.

Table 37   Item Values

Item	Meaning	newValue
1	Use style	Boolean
2	Font name	Text
3	Font size	Number
4	Bold	Boolean
5	Italic	Boolean
6	Underline	Boolean
7	Strikeout	Boolean
8	Foreground color	Number
9	Background color	Number
10	Border	Boolean

Foreground and background colors are shown in Table 38.

Table 38   Foreground and Background Colors

Integer	Color
1	Black
2	White
3	Red
4	Lime
5	Blue
6	Yellow

Integer	Color
7	Fuchsia
8	Aqua
9	Maroon
10	Green
11	Navy
12	Olive
13	Purple
14	Teal
15	Silver
16	Gray

Example

This example sets the style for child members to italic and displays the style in the spreadsheet.

```
=EssSetStyle("[Sample.xls]Sheet1",1,,5,TRUE)
=EssSetStyle("[Sample.xls]Sheet1",1,,1,TRUE)
```

EssUnlock

Description

Unlocks cells on the server for the specified spreadsheet.

Syntax

```
EssUnlock([workbookName]sheetName)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet from which the connection information is used.

Example

```
=EssUnlock("[Sample.xls]Sheet1")
```

Note: The active spreadsheet is used when the *sheetName* parameter is missing.

EssZoomIn

Description

Zooms in on the selected members.

Syntax

`EssZoomIn([`*`workbookName`*`]`*`sheetName`*`, `*`range`*`, `*`selection`*`, `*`level`*`, `*`across`*`)`

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieve occurs.

range is a reference to the area of data to be retrieved.

selection is a reference to the affected member or members.

level is a number which indicates the granularity of the zoom. The level parameters and associated action are shown in Table 39.

Table 39   Level Parameters and Actions

Level	Action
1	Zoom In to next level (children).
2	Zoom In to all levels (descendants).
3	Zoom In to the lowest level (bottom).
4	Zoom In using siblings.
5	Zoom In to same level.
6	Zoom In to same generation.
7	Zoom In via calculation script.

across is a logical value that specifies whether the resulting zoomed in data should appear in the spreadsheet going across or down. A TRUE value indicates that the data should be displayed across while a FALSE value indicates that the data should be displayed downward. across is only meaningful for top-level members of a dimension, also known as dimension or title members (for example, Products in Sample Basic).

Example

`=EssZoomIn("[Sample.xls]Sheet1", SAMPLE.XLS!A1:G20, SAMPLE.XLS!B2,2,FALSE)`

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.

- The contents of *sheetName* is used when the *range* parameter is missing.

- The active cell of *sheetName* is used when the *selection* parameter is missing.

- A value of 1 is assumed when the *level* parameter is missing.

- A value of FALSE is assumed when the *across* parameter is missing.

EssZoomOut

Description

Zooms out on the selected members.

Syntax

```
EssZoomOut([workbookName]sheetName, range, selection)
```

Where [*workbookName*]*sheetName* is the text name of the workbook and worksheet to which the retrieval occurs.

range is a reference to the area of data that is retrieved.

selection is a reference to the affected member or members.

Example

```
=EssZoomOut("[Sample.xls]Sheet1", SAMPLE.XLS!B5,SAMPLE.XLS!B2)
```

Notes:

- The active spreadsheet is used when the *sheetName* parameter is missing.
- The contents of *sheetName* is used when the *range* parameter is missing.
- The active cell of *sheetName* is used when the *selection* parameter is missing.

Menu Equivalent Macro Reference

These spreadsheet macros are identical to the equivalent commands on the Essbase menu. Use the macros to perform actions as if you selected them from the menu. The requirements for the macros are the same as those for the menu commands. For example, if you must be logged in to an instance of Analytic Server to use a menu command, you must also be logged in to Analytic Server to use the equivalent spreadsheet macro.

Consult the Contents pane for an alphabetical listing of Menu Equivalent macros.

EssMenuCalculate

Description

Opens the Essbase Calculation dialog box and enables you to calculates the active database or checks on the status of an active database calculation.

Syntax

```
EssMenuCalculate()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuCalculate()
```

EssMenuCascade

Description

Opens the Essbase Cascade Options dialog box and enables you to replicate worksheets using member combinations.

Syntax

```
EssMenuCascade()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuCascade()
```

EssMenuConnect

Description

Opens the Essbase System Login dialog box and enables you to connect to a an instance of Analytic Server.

Syntax

```
EssMenuConnect()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuConnect()
```

EssMenuCurrencyReport

Description

Opens the Essbase Currency Report dialog box if the connected database is associated with a currency database and enables you to perform ad-hoc currency conversions during data retrieval.

Syntax

```
EssMenuCurrencyReport()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuCurrencyReport()
```

EssMenuDatalessNav

Description

Controls whether navigational operations such as Pivot, Zoom In, Zoom Out, Keep Only, and Remove Only retrieves data. A check mark next to the command in the Essbase menu indicates this feature is turned on. This command serves the same function as using Navigate without Data in the Essbase Options dialog box. If Navigate Without Data is currently on, selecting it turns it off, and vice versa.

Syntax

```
EssMenuDatalessNav()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuDatalessNav()
```

EssMenuDisconnect

Description

Opens the Essbase Disconnect dialog box.

Syntax

```
EssMenuDisconnect()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuDisconnect()
```

EssMenuHelp

Description

Opens the *Oracle Essbase Spreadsheet Add-in User's Guide.*

Syntax

```
EssMenuHelp()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuHelp()
```

EssMenuFlashBack

Description

Restores the previous view.

Syntax

```
EssMenuFlashBack()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuFlashBack()
```

EssMenuKeepOnly

Description

Retains only the selected member (the active cell) or member range in the worksheet.

Syntax

```
EssMenuKeepOnly()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuKeepOnly()
```

EssMenuLinkedObjects

Description

Opens the Linked Objects Browser dialog box when you select cells to edit LROs.

Syntax

```
EssMenuLinkedObjects()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuLinkedObjects()
```

EssMenuLock

Description

Locks data blocks that appear in the current worksheet. You can lock only one view.

Syntax

```
EssMenuLock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuLock()
```

EssMenuMemberSelect

Description

Opens the Essbase Member Selection dialog box and enables you to select members from the multidimensional database outline.

Syntax

```
EssMenuMemberSelect()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuMemberSelect()
```

EssMenuOptions

Description

Opens the Essbase Options dialog box and enables you to select options for the active worksheet and customize the behavior of Spreadsheet Add-in software.

Syntax

```
EssMenuOptions()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuOptions()
```

EssMenuPivot

Description

Changes the orientation (from row to column or from column to row) of the group of members associated with the active cell.

Syntax

```
EssMenuPivot()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuPivot()
```

EssMenuQueryDesigner

Description

Opens Query Designer.

Syntax

```
EssMenuQueryDesigner()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuQueryDesigner()
```

EssMenuRemoveOnly

Description

Removes only the selected member (the active cell) or member range in the worksheet.

Syntax

```
EssMenuRemoveOnly()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuRemoveOnly()
```

EssMenuRetrieve

Description

Retrieves data into the active worksheet, and places the data at the beginning of the active worksheet.

Syntax

```
EssMenuRetrieve()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuRetrieve()
```

EssMenuRetrieveLock

Description

Locks the data blocks specified in the retrieval. Other users cannot update blocks you locked.

Syntax

```
EssMenuRetrieveLock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuRetrieveLock()
```

EssMenuSend

Description

Updates the active database on the server with data in your worksheet.

Syntax

```
EssMenuSend()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuSend()
```

EssMenuUnlock

Description

Unlocks blocks that you locked

Syntax

```
EssMenuUnlock()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuUnlock()
```

EssMenuWizard

Description

Opens Retrieval Wizard.

Syntax

```
EssMenuWizard()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuWizard()
```

EssMenuZoomIn

Description

Retrieves and expands data from Essbase according to the options specified in the Essbase Options dialog box.

Syntax

```
EssMenuZoomIn()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuZoomIn()
```

EssMenuZoomOut

Description

Collapses the view of data according to the options specified in the Essbase Options dialog box.

Syntax

```
EssMenuZoomOut()
```

Return Value

Returns 0 if successful. A negative number indicates a local failure (see "VBA Return Values" on page 218). A return value greater than zero indicates a failure on the server.

Example

```
=EssMenuZoomOut()
```

13

Using Drill-Through

About Drill-Through Wizard

Drill-Through Wizard enables you to customize predefined drill-through reports. The Drill-Through Wizard guides you through these tasks:

- Selecting which columns to retrieve from the relational data source

  Decide which columns you must see from the predefined report.

- Selecting the display order for columns

  Change the default display order of columns across the worksheet.

- Selecting a sort order for data

- Selecting a sort order for a column

- Selecting data filters

From Spreadsheet Add-in, you can access detail-level drill-through reports that are based on the member intersections of Essbase data cells in the worksheet. Using Drill-Through Wizard, you can also customize a predefined drill-through report.

Related Topics

"About Drill-Through" on page 257

"Customizing Reports with Drill-Through Wizard" on page 259

"Selecting Reports to View or Customize" on page 259

About Drill-Through

From Spreadsheet Add-in, you can access detail-level drill-through reports that are based on the member intersections of Essbase data cells in your worksheet. Using Drill-Through Wizard, you can also customize a predefined drill-through report.

Accessing Drill-Through

➤ To access drill-through reports from Spreadsheet Add-in:

1 Locate a **drill-through cell** as indicated by its style.

   Select one cell or a continuous range of cells from the same parent in the worksheet to display all drill-through reports associated with the cell you select.

   Note: For Integration Server to return a drill-through report when multiple cells are selected, all members selected for multiple-cell drill-through must come from these locations:

   - The same physical table and column in the relational source database
   - The same member level in the underlying OLAP metaoutline
   - The same hierarchy.

     A multiple-cell drill-through operation is valid only if all three criteria noted above are met. A message is displayed if the combination of cells you select is invalid for performing a multiple-cell drill-through operation.

2 Select **Essbase**, and then **Linked Objects**.

   If you are selecting one cell, you may alternatively select Enable Linked Object Browsing in the Essbase Options dialog box (Global page), which enables you to double-click a linked object cell to open Linked Objects Browser.

3 Select the drill-through report, and then click **View/Launch**.

   Essbase launches drill-through. If only one report exists for the selected cells, and if that report is not designed to be customized, drill-through generates the report and displays the results in a spreadsheet. The worksheet is added before the current worksheet.

4 If you are prompted by the display of the **Drill-Through Login** to connect to Integration Server and an SQL data source, enter the Integration Server name and your database user name and password.

5 If multiple reports exist for the cell or cell range that you select, follow the steps in "Selecting Reports to View or Customize" on page 259 to select a report.

   Note: An administrator at your organization develops drill-through reports and specifies (1) whether you can customize the report, and (2) whether you must log on to Integration Services and the relational data source.

Related Topics

"Customizing Reports with Drill-Through Wizard" on page 259

"About Drill-Through" on page 257

Selecting Reports to View or Customize

If multiple drill-through reports exist for the cell or cell range that you select in the spreadsheet, Integration Services displays the Select Drill-Through Report dialog box. This dialog box displays the list of drill-through reports available for the cells that you select in the spreadsheet. Depending on how the report was defined in Integration Services Console, your access may be only to view, and not to customize, reports.

➤ To view a drill-through report:

1 From **Available Reports**, select a report.

2 Click **Execute**.

Integration Services retrieves the data from the relational source and displays the results in a spreadsheet. The worksheet is added before the current active worksheet.

➤ To customize a drill-through report:

1 From **Available Reports**, select a report.

2 Click **Customize**.

3 Click **Next** to display the **Select Columns and Display Order**.

4 Follow the steps in "Selecting and Ordering Columns" on page 260 to select and order columns for the customized report.

Note: The **Customize** button may be enabled or disabled for a given report, depending on how the report was defined in Integration Services Console.

Related Topics

"Accessing Drill-Through" on page 258

"Customizing Reports with Drill-Through Wizard" on page 259

Customizing Reports with Drill-Through Wizard

Drill-Through Wizard enables you to customize predefined drill-through reports. For example, you can choose to exclude certain columns or to change row and column ordering. To customize a report using the wizard, you must access drill-through and select a report.

Drill-Through Wizard guides you through these tasks:

1. "Selecting and Ordering Columns" on page 260 to retrieve from the relational database

2. "Selecting Data Sort Order" on page 261 for the drill-through report

3. "Selecting Data Filters" on page 262 to determine what Integration Services retrieves for the report.

Related Topics

Selecting and Ordering Columns

In the Select Columns and Display Order dialog box, you select source columns from to be displayed in the drill-through report, and you determine the display order of columns across the spreadsheet. These columns contain detailed information not available in the Essbase database; for example, a list of store managers.

The Selected Columns list box displays the columns from the Available Columns list box in expanded form. These columns are part of the drill-through report (as defined in Integration Services Console by an administrator at your organization). You can move columns out of the Selected Columns list box to exclude them from the drill-through report.

➤ To select and order columns for the drill-through report:

1   In **Available Columns**, select the column to include in the report.

    Click ⊞ to view all columns in a dimension.

2   Use the arrows to move selected columns to and from **Selected Columns**.

3   To rearrange the display order of columns, select a column to rearrange in **Selected Columns**, and then click **Move Up** or **Move Down**.

4   When all columns that you want included in the report are displayed in the correct order in **Selected Columns**, perform an action:

    ●   Click **Next** and follow the steps in "Selecting Data Sort Order" on page 261 to further customize the report.

    ●   Click **Finish** to generate the report and view the results in the spreadsheet.

Related Topics

Sorting Multiple Columns

➤ To select a sort order for multiple columns simultaneously:

1   To select columns in the list that are not adjacent, press **Ctrl** and select each column for which you want to select a sort order. To select a range of columns, press **Shift** and click the first and last columns in the list, which also selects all columns in between them.

2   Click **Order By**.

3   Select **Ascending** or **Descending**, and then click **OK**.

Related Topics

Selecting Data Sort Order

In the Select Data Sort Order dialog box, you can determine the order in which Integration Services displays the rows that it retrieves. For example, you can sort the contents of a `REGION.DIRECTOR` column in ascending order to present the regional directors in alphabetical order in the drill-through report.

➤ To define the sort order of rows in the drill-through report:

1 Perform the tasks described in .

2 In **Available Columns**, select the column for which you want to define a sort order.

   The columns in the Available Columns list box are those that you selected in .

   The columns in the Column list box are those for which a sort order is defined in Integration Services.

3 Use the arrows to move columns to and from the right list box.

4 To rearrange the display order of columns, select the column to rearrange in **Column**, and then click **Move Up** or **Move Down**.

5 In **Column**, select a column for which you want to define the row order.

6 Double-click the column to change the data sort order from **Ascending** to **Descending** (or conversely) to define whether the rows in the report are sorted in ascending or descending order.

   If a data sort order was selected when the report was created in Integration Services, that selection is displayed in the Order by list. Otherwise, the default sort order is *ascending*.

7 To change the data sort order for multiple columns simultaneously, see .

8 When you finish arranging and sorting rows, perform an action:

   ● Click **Next** and follow the steps in to further customize the report.

   ● Click **Finish** to generate the report and view the results in the spreadsheet.

   ● Click **Back**.

Related Topics

Selecting Data Filters

In the Select Data Filters dialog box, you can apply filters to determine which data Integration Services retrieves for the drill-through report.

➤ To apply an existing filter:

1 Perform the tasks described in "Selecting Data Sort Order" on page 261.

2 In **Filter**, select a filter to apply to this drill-through report.

The full string of the filter is displayed in the lower Condition box.

3 Click **Finish**.

Integration Services generates the customized drill-through report and displays the results in the spreadsheet. The worksheet is added before the current active worksheet.

➤ To apply a new filter:

1 Perform the tasks described in "Selecting Data Sort Order" on page 261.

2 From **Column**, select a column.

The columns in the Column list box are those that you selected in "Selecting and Ordering Columns" on page 260.

If a filter is attached to the column, it is displayed in the Condition list box. The full string of the filter is displayed in the lower Condition box.

3 Click **Add condition**.

4 To set the conditions of the filter, see "Creating Member Filters" on page 263.

5 To add this filter to the list of saved filters, click **Add new filter**.

6 In **Filter Name** enter a **Name** for this filter.

If you want the filter description and conditions to match the filter that you just created, select Copy definition of current filter, and then click OK.

7 To clear a filter, select the filter; and then click **Clear**; to clear all filters, click **Clear All**.

Clicking Clear or Clear All does not delete permanently saved filters.

8 When you are finished editing and deleting filters, click **Finish**.

Integration Services generates the customized drill-through report and displays the results in the spreadsheet. The worksheet is added before the current active worksheet.

Note: After a drill-through operation, if you attempt to disconnect from Essbase from a worksheet in the current workbook, an Essbase error message is displayed. To disconnect, first do a retrieval from the worksheet, and then disconnect.

Related Topics

"Creating Member Filters" on page 263

Creating Member Filters

You can define which members Integration Services retrieves for a drill-through report. The member filters that you define can be used once or can be saved and accessed again, as described in "Selecting Data Filters" on page 262.

➤ To create a member filter:

1 In **Set Filter on Column**, select the column to which the condition applies from **Column**.

   The column displayed in the Column list box is the one you selected in "Selecting Data Filters" on page 262.

2 Use one method to create the filter:

   ● Build the filter interactively. Proceed to step 3.

   ● Enter the filter directly into the Filters list box and proceed to step 4.

     Use the SQL syntax supported by the relational data source; for example:

     ```
     Region.Director in ('West')
     ```

3 To build a filter interactively, perform these tasks:

   a. Select the operator to use from **Operator**.

   b. Enter the condition in **Condition** (for example, West), or click Browse to open a list of all possible values for that column.

       Integration Services retrieves these values directly from the relational data source. If the relational data source contains many values, Integration Services confirms whether to view them all.

   c. Select the value, and then click **OK**.

       To select multiple values that are not adjacent, press Ctrl and click each value. To select a range of values, press Shift and click the first and last values. You can select multiple values only if you selected *in* or *not in* as the operator.

   d. If you specify multiple conditions, from **Add Type**, select **And** or **Or**.

   e. Click **Add**.

4 To define another condition on the filter, return to step 2.

5 Optional: Edit filters using the SQL syntax required by the relational data source.

6 Click **OK**.

To permanently save this filter, see "Saving, Deleting, and Renaming Member Filters" on page 264.

Related Topics

"Saving, Deleting, and Renaming Member Filters" on page 264

"Selecting Data Filters" on page 262

Saving, Deleting, and Renaming Member Filters

➤ To save filters, in **Select Data Filters**, click **Save Filters**.

All filters created for the drill-through report are saved.

Whenever you use the Select Data Filters dialog box, you can select from the list of filters that you saved.

Note: You must click Save Filters to save changes, such as adding, deleting, or renaming, to the filters.

➤ To delete filters:

1   In **Select Data Filters**, from **Filter**, select a filter to delete.

2   Click **Delete**.

3   Click **Save Filters**.

➤ To rename filters:

1   In **Select Data Filters**, from **Filter**, select a filter to rename.

2   Click **Rename**.

3   In **Filter Name**, enter a name for the filter.

4   Click **OK**.

5   Click **Save Filters**.

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Essbase Login Help

Essbase System Login Dialog Box

To use Essbase, you must first log on to the server.

➤ To log on to an Essbase Server:

1 Select **Essbase**, and then **Connect**.

2 In **Essbase System Login**, in **Server**, select the server you want to access or enter the name of the server.

3 Enter your user name.

4 Enter your password.

5 Click **OK**.

When the server connection is complete, a list of available application and database pairs is displayed in the Application/Database list. Essbase enables simultaneous access to multiple applications. An application can contain multiple databases. Only databases that you can access are displayed in the list.

6 Select an application and database pair, and then click **OK**.

Change Password Dialog Box

Use the Change Password dialog box to change your password on Essbase Server. You can change your password only if you are connected to a server.

➤ To change your password:

1 Select **Essbase**, and then **Connect**.

If you are not currently connected to a database, you must connect to one.

2 Click **Change Password**.

3   Enter a password in **New Password**.

4   Enter the password again in **Confirm Password**.

5   Click **OK**.

> **Note:** If Essbase forces you to change your password (for example, if your password expires) the Change Password dialog box is displayed automatically.

Database Note Dialog Box

The Database Note dialog box displays an informative note for the active database. A database note provides useful information from the Essbase administrator to other users of a database. For example, the note can be used to broadcast messages about the status of a database, deadlines for updates, and so on.

A

Basic Tutorial

About the Basic Tutorial

This tutorial describes basic tasks that you use most often when working with Essbase. (Appendix B describes more advanced tasks.)

The examples in this tutorial are based on the Sample Basic database that is included with the Essbase installation. Contact the Essbase system administrator for information about accessing the Sample Basic database and other databases on Essbase Server.

This tutorial assumes the Spreadsheet Add-in is installed and loaded on your computer, and that the Essbase toolbar is activated. See Chapter 2, "Getting Started with Spreadsheet Add-in."

Review these important sections before starting the basic tutorial:

- "Basic Tutorial Prerequisites" on page 267
- "Tutorial Guidelines" on page 268
- "About the Sample Basic Database" on page 269
- "Restarting the Tutorial" on page 269

Basic Tutorial Prerequisites

Before you begin the Basic tutorial, you must set Essbase options so that your worksheet view matches the tutorial illustrations.

➤ To set worksheet options:

1 **Start Excel.**

2 **Select Essbase, and then Options.**

3 **In Essbase Options, select Display, and then verify that only these Display options are selected:**

- Indentation—Totals
- Cells—Adjust Columns
- Aliases—Use Alias

Clear all other Display options.

4 **Select Zoom, and then verify that only these Zoom options are selected:.**

- Zoom In—Next Level
- Member Retention—Include Selection
- Sampling Percentage—100

Clear all other Zoom options.

5 **Select Mode, and then Under Retrieval, verify that Advanced Interpretation is selected.**

Clear all other Mode options.

6 **Select Global, and then verify that only these Global options are selected:**

- Mouse Actions
  - ❍ Limit to Connected Sheets
  - ❍ Enable Secondary Button
  - ❍ Enable Double-Clicking
  - ❍ Enable Linked Object Browsing
- Memory—Enable Flashback
- Display Messages—Errors
- Log File
  - ❍ Route Messages to Log File
  - ❍ Purge Log File Every Session

Clear all other Global options.

7 **Click OK.**

Tutorial Guidelines

Keep in mind these guidelines during this tutorial:

- You must be connected to the Sample Basic database during the tutorial so that your worksheet view matches the tutorial illustrations.

- To access many Essbase commands:
  - Select the command from the Essbase menu
  - Click the icon on the Essbase toolbar
  - For the Zoom In and Zoom Out commands, double-click the primary or the secondary mouse button

- After you change a worksheet option in the Essbase Options dialog box, you must perform a retrieval or a drill-down operation for the setting to take effect.

- Follow each step in the tutorial because each task builds upon the previous task. Do not skip the final steps at the end of sections, because these steps are often necessary to prepare you for the next tutorial task.

- If you err or find yourself out of step with the tutorial, select Essbase, and then FlashBack, to undo the last command and return to the previous worksheet view.

- The values in the Sample Basic database that represent ratios or percentages are calculated to a very high level of precision (for example, 55.26162826). You can apply a cell format to control the number of decimal places that are displayed in data values. For details on applying cell formats, see the Excel documentation.

- Numeric values shown in the tutorial illustrations reflect a freshly loaded database and may not match the values stored in your database.

- Some worksheet columns are adjusted for clarity in the illustrations. Do not change the width of columns in the worksheet to follow the tutorial steps. The Adjust Columns option in the Display page of the Essbase Options dialog box adjusts columns for you.

About the Sample Basic Database

The Sample Basic database used in this tutorial is based on a hypothetical company in the beverage industry. The major products of the company are various kinds of sodas. These products are sold in U.S. markets, which are categorized by state and region. Financial data for the company is collected monthly and is summarized by quarter and by year. The company uses Essbase to calculate financial and accounting data, such as sales, cost of goods sold, and payroll. The company tracks actual and budget data, and the variance and percent variance between actual and budget data.

Restarting the Tutorial

➤ To restart the tutorial:

1   Select the worksheet.

2   Select **Edit**, then **Clear**, and then **All**

3   Press **Enter** or click **OK**.

Retrieving Data

Now that you are more familiar with the Essbase environment, you can connect to an instance of Essbase Server and start using Essbase and Spreadsheet Add-in. This section guides you through a typical Essbase session where you connect to a database and retrieve data in various ways.

This topic outlines these basic retrieval tasks:

- "Lesson: Connecting to a Database" on page 270
- "Lesson: Retrieving Data from a Database" on page 271
- "Lesson: Drilling Down to More Detail" on page 272
- "Lesson: Drilling Up to Less Detail" on page 274
- "Lesson: Customizing Drill-Down and Drill-Up Behavior" on page 275

Caution! If your Essbase Options settings differ from the settings specified in "Basic Tutorial Prerequisites" on page 267, your worksheet view will not match the illustrations shown in this tutorial.

Remember that you can perform common data retrieval tasks in these ways:

- Select commands from the Essbase menu on the Excel menu bar
- Double-click the primary or secondary mouse button in the cell (for Retrieve, Zoom In, and Zoom Out commands)
- Click the Essbase toolbar icons

Lesson: Connecting to a Database

To access Essbase data, you must first connect to a database on an instance of Essbase Server. This tutorial assumes that you can connect to a server, an application, and a database.

To complete this lesson, you need the name of the server to which you want to connect, your user name, and your password. If you do not know this information, contact the Essbase system administrator.

Note: Essbase does not support multiple instances of Excel.

➤ To connect to an Essbase Server, application, and database:

1   Select **Essbase**, and then **Connect.**

    The Essbase System Login dialog box is displayed.

2   From **Server**, select the server to access, or enter the server name.

3   Enter your **user name.**

4   Enter your **password**.

5   Click **OK**.

A list of available application/database pairs is displayed in the Application/Database list box.

6   Select **Sample Basic**, and then click **OK**.

If Sample Basic is not shown in the Application/Database list box, ask the Essbase system administrator to install it.

User Reference

Lesson: Retrieving Data from a Database

You use Spreadsheet Add-in to request data from Essbase Server and retrieve the information into a worksheet.

➤   To retrieve data into a blank worksheet:

1   Select **File**, and then **New**, or click [icon].

You must be connected to the Sample Basic database.

2   Perform one action:

- Double-click an empty cell, or press Alt+S+R.

- Select **Essbase**, and then **Retrieve**.

- Click [icon] on the Essbase toolbar, or press Alt+S+R.

Essbase retrieves data into the worksheet.

	A	B	C	D	E	F
1		Measures	Product	Market	Scenario	
2	Year	105522				
3						
4						
5						

Note: Spreadsheet Add-in does not support worksheet sizes greater than 65,536 rows by 256 columns.

These five dimensions are retrieved: Measures, Product, Market, Scenario, and Year.

When you retrieve data into a blank worksheet, Essbase returns data from the top levels of each dimension, from which you can navigate, or drill down, to more detailed levels of data.

User Reference

Lesson: Drilling Down to More Detail

You can drill down to various levels of multidimensional data in the worksheet. For example, if you want to view data for a quarter or month rather than an aggregate data value for the whole year, you can drill down on the Year dimension.

➤ To drill-down on members, perform one action:

- Select the member, then select **Essbase**, and then **Zoom In**.
- Select the member, and then double-click the primary mouse button.
- Select the member, and then click **Zoom In** on the Essbase toolbar.

Lesson: Drilling Down on Rows

➤ To drill down to lower levels of the Year dimension:

1   On **Year** in cell **A2**, double-click the primary mouse button.

    The drill-down action retrieves data for the level below (the children of) Year: Qtr1, Qtr2, Qtr3, and Qtr4:

	A	B	C	D	E	F
1		Measures	Product	Market	Scenario	
2	Qtr1	24703				
3	Qtr2	27107				
4	Qtr3	27912				
5	Qtr4	25800				
6	Year	105522				

    With Essbase, you can retrieve members into columns or rows that are grouped or nested. Row groups containing multiple levels of data are nested within single-member row groups. For example, a row group containing Qtr1, Qtr2, Qtr3, and Qtr4 may be nested within one-member row for a region, such as East. Drilling down to lower levels of database members is one way to retrieve data into nested groups.

2   In cell **D1**, double-click to drill down on Market and create nested groups of rows down the worksheet:

	A	B	C	D	E	F
1			Measures	Product	Scenario	
2	East	Qtr1	5380			
3		Qtr2	6499			
4		Qtr3	6346			
5		Qtr4	5936			
6		Year	24161			
7	West	Qtr1	7137			
8		Qtr2	7515			
9		Qtr3	7939			
10		Qtr4	7270			
11		Year	29861			

User Reference

"Drilling Down to More Detail" on page 54

Lesson: Drilling Across Columns

You can display the results of a drill-down across columns. Drilling across columns applies only to the top-level member of a dimension (for example, Product or Scenario).

➤ To drill down on Scenario and retrieve its respective members into columns:

1 Press **Alt** and double-click **Scenario** (in cell E1).

2 Release **Alt**.

Essbase displays the data in columns across the worksheet:

	A	B	C	D	E	F	G
1			Measures	Product			
2			Actual	Budget	Variance	Variance %	Scenario
3	East	Qtr1	5380	6500	-1120	-17.23076923	5380
4		Qtr2	6499	7550	-1051	-13.9205298	6499
5		Qtr3	6346	7550	-1204	-15.94701987	6346
6		Qtr4	5936	6790	-854	-12.57731959	5936
7		Year	24161	28390	-4229	-14.89609017	24161
8	West	Qtr1	7137	8960	-1823	-20.34598214	7137
9		Qtr2	7515	9290	-1775	-19.1065662	7515
10		Qtr3	7939	9870	-1931	-19.56433637	7939
11		Qtr4	7270	9060	-1790	-19.75717439	7270
12		Year	29861	37180	-7319	-19.68531469	29861

3 Keep this worksheet open, but do not save it.

You use this worksheet again in "Lesson: Drilling Up to Less Detail" on page 274.

User Reference

"Drilling Down to More Detail" on page 54

Lesson: Drilling Down on Attribute Members

You can retrieve and analyze data in terms of characteristics, or *attributes*, of dimensions. For example, you can analyze product profitability based on the attributes of size or packaging. Attribute dimensions are associated with base dimensions.

➤ To drill down on an attribute dimension:

1 Open a worksheet.

2 Select **Essbase**, and then **Retrieve**.

   If necessary, connect to the Sample Basic database.

3 Select **Product** and, to replace it, enter `Can`.

4 Click anywhere outside of cell **C1** and select **Essbase**, and then **Retrieve**.

	A	B	C	D	E
1		*Measures*	Can	*Market*	*Scenario*
2	*Year*	39578			

5 Double-click, or press Alt+S+I, **Can** in cell **C1** to drill down to all products sold in a can.

   Cola, Diet Cola, and Diet Cream are the members of Product with the Can attribute.

	A	B	C	D	E	F
1				*Measures*	*Market*	*Scenario*
2	*Year*	Can	Cola	22777		
3			Diet Cola	5708		
4			Diet Cream	11093		

User Reference

Oracle Essbase Database Administrator's Guide

Lesson: Drilling Up to Less Detail

With Essbase, you can drill up to higher levels in the multidimensional database outline by collapsing the current member tree. For example, if you previously drilled down on a dimension, such as Scenario, to view data for Actual and Budget, drill up to view aggregate data for the Scenario dimension.

➤ To drill up on a member, use one option:

● Select the member, then select **Essbase**, and then **Zoom Out**.

● Select the member, and then double-click the secondary mouse button.

● Select the member, and then click **Zoom Out** on the Essbase toolbar.

➤ To drill up on the Scenario dimension in the current worksheet:

1 Return to the worksheet that you kept open in step 3 under "Lesson: Drilling Down to More Detail" on page 272.

2 On a member of the Scenario dimension (that is, cell C2, D2, E2, F2, or G2), double-click the secondary mouse button.

Essbase collapses the members of the Scenario dimension:

	A	B	C	D	E	F
1			Measures	Product		
2			Scenario			
3	East	Qtr1	5380			
4		Qtr2	6499			
5		Qtr3	6346			
6		Qtr4	5936			
7		Year	24161			

3 In cell **A3**, double-click the secondary mouse button to drill up on East.

Essbase collapses East, West, South, and Central into the Market dimension and keeps the dimension in the A column:

	A	B	C	D	E	F
1			Measures	Product		
2			Scenario			
3	Market	Qtr1	24703			
4		Qtr2	27107			
5		Qtr3	27912			
6		Qtr4	25800			
7		Year	105522			

User Reference

"Drilling Up to Less Detail" on page 53

Lesson: Customizing Drill-Down and Drill-Up Behavior

You can customize the behavior of the Zoom In and Zoom Out commands in the Essbase Options dialog box. These steps illustrate some drill-down and drill-up techniques.

➤ To retrieve *all* members of a dimension with one drill-down operation:

1 Select **Essbase**, and then **Options**.

2 In **Zoom**, under **Zoom In**, select **All Levels**, and then click **OK**.

3 In cell **A3**, drill down (double-click) on Market.

4 In cell **C2**, drill down (double-click) on Scenario.

Essbase retrieves all members of Market and Scenario:

	A	B	C	D	E	F	G
1			Measures	Product			
2			Actual	Budget	Variance	Variance %	Scenario
3	New York	Qtr1	1656	2000	-344	-17.2	1656
4		Qtr2	2363	2610	-247	-9.46360153	2363
5		Qtr3	1943	2290	-347	-15.1528384	1943
6		Qtr4	2240	2320	-80	-3.44827586	2240
7		Year	8202	9220	-1018	-11.0412148	8202
8	Massachusetts	Qtr1	1532	1690	-158	-9.34911243	1532
9		Qtr2	1750	1900	-150	-7.89473684	1750
10		Qtr3	1936	2100	-164	-7.80952381	1936
11		Qtr4	1494	1610	-116	-7.20496894	1494
12		Year	6712	7300	-588	-8.05479452	6712

For the Market dimension, Essbase drill down two levels to get to the bottom-most members, which are individual states.

The Scenario dimension contains only one member level, so the members of Scenario are retrieved if you select Next Level in the Zoom In option group.

5   Select **Essbase**, and then **Options**.

6   In **Zoom**, set **Zoom In** to **Next Level**.

You may want to drill up on only one quarter of the year.

➤   To drill up only on Qtr1:

1   In **Zoom**, under **Member Retention**, select **Within Selected Group**.

2   Verify that **Include Selection** is selected, and then click **OK**

3   To drill up on Qtr1, in cell **B3**, double-click the secondary mouse button.

Drilling up to the Year dimension affects only New York. All other states show data for all four quarters.

	A	B	C	D	E	F	G
1			Measures	Product			
2			Actual	Budget	Variance	Variance %	Scenario
3	New York	Year	8202	9220	-1018	-11.04121475	8202
4	Massachusetts	Qtr1	1532	1690	-158	-9.349112426	1532
5		Qtr2	1750	1900	-150	-7.894736842	1750
6		Qtr3	1936	2100	-164	-7.80952381	1936
7		Qtr4	1494	1610	-116	-7.204968944	1494
8		Year	6712	7300	-588	-8.054794521	6712
9	Florida	Qtr1	1070	1300	-230	-17.69230769	1070
10		Qtr2	1339	1570	-231	-14.7133758	1339
11		Qtr3	1495	1730	-235	-13.58381503	1495
12		Qtr4	1125	1300	-175	-13.46153846	1125

4   Select **Essbase**, and then **Options**.

5   In **Zoom**, under **Member Retention**, clear **Within Selected Group**, and then click **OK**.

6   Select **File**, and then **Close**.

Do not save the worksheet.

Pivoting, Retaining, and Suppressing Data

After you retrieve data into the worksheet, you can manipulate the data in various ways. For example, you can move rows and columns to various positions in the worksheet, or you can tell Essbase to suppress or to retain data during data retrievals.

To help you manipulate worksheet data, this section steps you through these procedures:

Make sure you are connected to the Sample Basic database. If you are not connected, follow the steps in "Lesson: Connecting to a Database" on page 270.

Lesson: Pivoting Rows and Columns

With the Pivot command, you can change the orientation of worksheet data.

➤ To pivot Year data from a row group to a column group:

1 Select **File**, and then **New** or click 🗋.

2 Select **Essbase**, and then **Retrieve**.

3 Drill down (double-click) on **Measures** and **Product** (in cells **B1** and **C1**, respectively).

4 Press **Alt**, and, in cell **E1**, drill down (double-click) on **Scenario**.

	A	B	C	D	E	F	G	H
1						Market		
2				Actual	Budget	Variance	Variance %	Scenario
3	100	Profit	Year	30468	41940	-11472	-27.35336195	30468
4		Inventory	Year	29448	31590	2142	6.780626781	29448
5		Ratios	Year	57.27288145	57.6240049	-0.351123447	-0.609335377	57.27288145
6		Measures	Year	30468	41940	-11472	-27.35336195	30468
7	200	Profit	Year	27954	35950	-7996	-22.24200278	27954
8		Inventory	Year	33000	31090	-1910	-6.143454487	33000
9		Ratios	Year	55.53966595	57.46674162	-1.927075664	-3.353375551	55.53966595
10		Measures	Year	27954	35950	-7996	-22.24200278	27954
11	300	Profit	Year	25799	29360	-3561	-12.12874659	25799
12		Inventory	Year	28865	27140	-1725	-6.355932203	28865
13		Ratios	Year	54.23795671	57.13950487	-2.901548161	-5.078007182	54.23795671
14		Measures	Year	25799	29360	-3561	-12.12874659	25799
15	400	Profit	Year	21301	22130	-829	-3.746046091	21301

5 In cell **C3**, select **Year**.

6 Select **Essbase**, and then **Pivot**.

Essbase pivots the Year dimension to a column group next to Market (above the Scenario members).

	A	B	C	D	E	F
1			Year	Market		
2			Actual	Budget	Variance	Variance %
3	100	Profit	30468	41940	-11472	-27.35336195
4		Inventory	29448	31590	2142	6.780626781
5		Ratios	57.27288145	57.6240049	-0.351123447	-0.609335377
6		Measures	30468	41940	-11472	-27.35336195
7	200	Profit	27954	35950	-7996	-22.24200278
8		Inventory	33000	31090	-1910	-6.143454487
9		Ratios	55.53966595	57.46674162	-1.927075664	-3.353375551
10		Measures	27954	35950	-7996	-22.24200278
11	300	Profit	25799	29360	-3561	-12.12874659
12		Inventory	28865	27140	-1725	-6.355932203
13		Ratios	54.23795671	57.13950487	-2.901548161	-5.078007182
14		Measures	25799	29360	-3561	-12.12874659

7 As another example, in cell **C2**, select **Actual**.

8 Right click and drag **Actual** to product **100** in cell **A3**.

	A	B	C	D	E	F
1			Year	Market		
2			Actual	Budget	Variance	Variance %
3	100	**Actual Budget Variance Variance% Scenario**			-11472	-27.35336195
4		Inventory	29448	31590	2142	6.780626781
5		Ratios	57.27288145	57.6240049	-0.351123447	-0.609335377
6		Measures	30468	41940	-11472	-27.35336195
7	200	Profit	27954	35950	-7996	-22.24200278
8		Inventory	33000	31090	-1910	-6.143454487
9		Ratios	55.53966595	57.46674162	-1.927075664	-3.353375551
10		Measures	27954	35950	-7996	-22.24200278
11	300	Profit	25799	29360	-3561	-12.12874659
12		Inventory	28865	27140	-1725	-6.355932203
13		Ratios	54.23795671	57.13950487	-2.901548161	-5.078007182
14		Measures	25799	29360	-3561	-12.12874659

When you pivot the Scenario members (Actual, Budget, Variance, and Variance%) from a column group to a row group, the row group is displayed to the left of the Product members:

	A	B	C	D	E
1				Year	Market
2	Actual	100	Profit	30468	
3			Inventory	29448	
4			Ratios	57.27288145	
5			Measures	30468	
6		200	Profit	27954	
7			Inventory	33000	
8			Ratios	55.53966595	
9			Measures	27954	
10		300	Profit	25799	
11			Inventory	28865	
12			Ratios	54.23795671	
13			Measures	25799	
14		400	Profit	21301	

➤ To transpose the order of row groups:

1 In cell **A2**, select **Actual**.

2 Right-click and drag **Actual** to **Profit** in cell **C2**.

The spreadsheet before the pivot operation:

	A	B	C	D	E	F	G
1				Year	Market		
2	Actual	100	Profit **Actual Budget Variance Variance% Scenario**				
3			Inventory	29448			
4			Ratios	57.27288145			
5			Measures	30468			
6		200	Profit	27954			
7			Inventory	33000			
8			Ratios	55.53966595			
9			Measures	27954			
10		300	Profit	25799			
11			Inventory	28865			
12			Ratios	54.23795671			
13			Measures	25799			
14		400	Profit	21301			
15			Inventory	26092			
16			Ratios	53.59966758			

The pivot changes the order of the row groups:

	A	B	C	D	E	F
1				Year	Market	
2	100	Profit	Actual	30468		
3			Budget	41940		
4			Variance	-11472		
5			Variance %	-27.35336195		
6			Scenario	30468		
7		Inventory	Actual	29448		
8			Budget	31590		
9			Variance	2142		
10			Variance %	6.780626781		
11			Scenario	29448		
12		Ratios	Actual	57.27288145		
13			Budget	57.6240049		
14			Variance	-0.351123447		
15			Variance %	-0.609335377		
16			Scenario	57.27288145		

In this example, notice that the source cell and the destination cell are now members.

User Reference

Lesson: Retaining a Data Subset

The Keep Only command retains only selected member rows or columns and removes all other data from the worksheet view.

➤ To keep only Actual and Budget data in the current worksheet:

1   In cell **C2**, select **Actual**, and in cell **C3**, select **Budget**:

	A	B	C	D	E	F
1				Year	Market	
2	100	Profit	Actual	30468		
3			Budget	41940		
4			Variance	-11472		
5			Variance %	-27.35336195		
6			Scenario	30468		
7		Inventory	Actual	29448		
8			Budget	31590		
9			Variance	2142		
10			Variance %	6.780626781		
11			Scenario	29448		
12		Ratios	Actual	57.27288145		
13			Budget	57.6240049		
14			Variance	-0.351123447		
15			Variance %	-0.609335377		
16			Scenario	57.27288145		

2   Select **Essbase**, and then **Keep Only**.

Essbase removes the Variance, Variance%, and Scenario rows from the worksheet and retains only Actual and Budget data:

	A	B	C	D	E	F
1				Year	Market	
2	100	Profit	Actual	30468		
3			Budget	41940		
4		Inventory	Actual	29448		
5			Budget	31590		
6		Ratios	Actual	57.27288145		
7			Budget	57.6240049		
8		Measures	Actual	30468		
9			Budget	41940		
10	200	Profit	Actual	27954		
11			Budget	35950		
12		Inventory	Actual	33000		
13			Budget	31090		
14		Ratios	Actual	55.53966595		
15			Budget	57.46674162		
16		Measures	Actual	27954		

➤ To select and retain nonadjacent cells:

1   Press **Alt**, and, in cell **D1**, zoom in (double-click) on **Year**.

2   Select **Qtr2** in cell **E2**.

3   Press **Ctrl** and select **Qtr4** in cell **G2**:

	A	B	C	D	E	F	G
1						Market	
2				Qtr1	Qtr2	Qtr3	Qtr4
3	100	Profit	Actual	7048	7872	8511	7037
4			Budget	9790	10660	11440	10050
5		Inventory	Actual	29448	29860	36461	35811
6			Budget	31590	29950	34830	32340
7		Ratios	Actual	57.40178857	57.28473167	57.39559978	56.99467561
8			Budget	57.7376566	57.39041794	57.45231167	57.96344648
9		Measures	Actual	7048	7872	8511	7037
10			Budget	9790	10660	11440	10050
11	200	Profit	Actual	6721	7030	7005	7198
12			Budget	8480	8840	8830	9800
13		Inventory	Actual	33000	31361	35253	32760
14			Budget	31090	28040	30260	26460
15		Ratios	Actual	55.38738874	55.49797453	55.06764011	56.21773123
16			Budget	57.36255286	57.40395375	57.11143695	57.9954955
17		Measures	Actual	6721	7030	7005	7198

4   Select **Essbase**, and then **Keep Only**.

Essbase retains only Qtr2 and Qtr4 data and deletes the other Year members:

	A	B	C	D	E	F
1				Market		
2				Qtr2	Qtr4	
3	100	Profit	Actual	7872	7037	
4			Budget	10660	10050	
5		Inventory	Actual	29860	35811	
6			Budget	29950	32340	
7		Ratios	Actual	57.28473167	56.99467561	
8			Budget	57.39041794	57.96344648	
9		Measures	Actual	7872	7037	
10			Budget	10660	10050	
11	200	Profit	Actual	7030	7198	
12			Budget	8840	9800	
13		Inventory	Actual	31361	32760	
14			Budget	28040	26460	
15		Ratios	Actual	55.49797453	56.21773123	
16			Budget	57.40395375	57.9954955	
17		Measures	Actual	7030	7198	

User Reference

Lesson: Removing a Data Set

Remove Only enables you to remove selected member rows or columns and retain all other data in the worksheet view.

➤ To remove a data set from the current worksheet view:

1   In cell **B7**, select **Ratios**.

2   Press **Ctrl**, and, in cell **B9**, select **Measures**.

3   Select **Essbase**, and then **Remove Only**.

Essbase removes data for Ratios and Measures but retains data for Profit and Inventory:

	A	B	C	D	E	F
1				Market		
2				Qtr2	Qtr4	
3	100	Profit	Actual	7872	7037	
4			Budget	10660	10050	
5		Inventory	Actual	29860	35811	
6			Budget	29950	32340	
7	200	Profit	Actual	7030	7198	
8			Budget	8840	9800	
9		Inventory	Actual	31361	32760	
10			Budget	28040	26460	
11	300	Profit	Actual	6769	6403	
12			Budget	7680	7000	
13		Inventory	Actual	30334	38142	
14			Budget	28460	35460	

User Reference

Lesson: Navigating Through a Worksheet Without Retrieving Data

The Navigate Without Data feature enables you to perform navigational operations without retrieving data into the worksheet.

This feature is useful when dealing with dynamic calculation members.

➤ To navigate through the worksheet without retrieving data:

1   Select **Essbase**, and then **Navigate Without Data**.

Essbase displays a check mark next to the menu item.

2   In cell **D2**, double-click the secondary mouse button to drill up on Qtr2.

Essbase shows the collapsed Year dimension but withholds retrieving data that is changed as a result of drilling up. The cells that normally display data (D3 through D14) are empty.

	A	B	C	D	E
1				Market	
2				Year	
3	100	Profit	Actual		
4			Budget		
5		Inventory	Actual		
6			Budget		
7	200	Profit	Actual		
8			Budget		
9		Inventory	Actual		
10			Budget		
11	300	Profit	Actual		
12			Budget		
13		Inventory	Actual		
14			Budget		

3   **In cell D2, drill down (double-click) on Year by pressing Alt.**

Essbase drills down without retrieving data.

4   **In cell C3, select Actual, then select Essbase, and then Pivot.**

Essbase executes the pivot but does not retrieve data.

	A	B	C	D	E	F	G	H	I	J	K	L
1							Market					
2					Actual					Budget		
3			Qtr1	Qtr2	Qtr3	Qtr4	Year	Qtr1	Qtr2	Qtr3	Qtr4	Year
4	100	Profit										
5		Inventory										
6	200	Profit										
7		Inventory										
8	300	Profit										
9		Inventory										
10	400	Profit										
11		Inventory										
12	Diet	Profit										
13		Inventory										
14	Product	Profit										

Note: You get the same result by pivoting any Scenario members.

5   **In cell G1, click the secondary mouse button on Market and drag Market to product 100 (cell A4).**

Essbase executes the pivot without retrieving data:

	A	B	C	D	E	F	G	H	I	J	K	L
1						Actual					Budget	
2				Qtr1	Qtr2	Qtr3	Qtr4	Year	Qtr1	Qtr2	Qtr3	Qtr4
3	Market	100	Profit									
4			Inventory									
5		200	Profit									
6			Inventory									
7		300	Profit									
8			Inventory									
9		400	Profit									
10			Inventory									
11		Diet	Profit									
12			Inventory									
13		Product	Profit									
14			Inventory									

➤ To navigate without data when using the Keep Only or Remove Only command:

1   Select **Qtr1** (cell **D2**) and **Qtr2** (cell **E2**), then select **Essbase**, and then **Keep Only**.

Essbase retains only the selected members and does not retrieve data:

	A	B	C	D	E	F	G	H
1				Actual		Budget		
2				Qtr1	Qtr2	Qtr1	Qtr2	
3	Market	100	Profit					
4			Inventory					
5		200	Profit					
6			Inventory					
7		300	Profit					
8			Inventory					
9		400	Profit					
10			Inventory					
11		Diet	Profit					
12			Inventory					
13		Product	Profit					

2   Select products **300** (cell **B7**), **400** (cell **B9**), and **Diet** (cell **B11**), then select **Essbase**, and then **Remove Only**.

Essbase executes the Remove Only command without querying the database for information:

	A	B	C	D	E	F	G	H
1				Actual		Budget		
2				Qtr1	Qtr2	Qtr1	Qtr2	
3	Market	100	Profit					
4			Inventory					
5		200	Profit					
6			Inventory					
7		Product	Profit					
8			Inventory					
9								

➤ To turn off Navigate Without Data when you are ready to retrieve data:

1 Select **Essbase**, and then **Navigate Without Data**.

Essbase removes the check mark next to the menu item.

2 In cell **A3**, drill down (double-click) on **Market**.

Essbase drills down on the Market dimension and retrieves data into the worksheet:

	A	B	C	D	E	F	G	H
1				Actual		Budget		
2				Qtr1	Qtr2	Qtr1	Qtr2	
3	East	100	Profit	2747	3352	2880	3480	
4			Inventory	5384	4490	5200	3530	
5		200	Profit	562	610	960	1070	
6			Inventory	5957	6442	5610	5910	
7		Product	Profit	5380	6499	6500	7550	
8			Inventory	25744	26214	24710	24030	
9	West	100	Profit	1042	849	2350	2130	
10			Inventory	8592	9656	10250	10950	
11		200	Profit	2325	2423	2570	2720	
12			Inventory	11755	11643	11070	10900	
13		Product	Profit	7137	7515	8960	9290	
14			Inventory	38751	41574	39020	42820	

User Reference

"Navigating Through Worksheets Without Retrieving Data" on page 59

"Retrieving Dynamic Calc Members" on page 43.

Lesson: Suppressing Missing Values

➤ To suppress rows that contain missing values from being displayed in the worksheet:

1 In cell **C3**, double-click the secondary mouse button to drill up on Profit.

2 Pivot **Measures** (in cell **C3**) to **Actual** (in cell **D1**).

3 In cell **B4**, drill down (double-click) on product **100**.

In the South member group, the product 100-30 row contains all missing values, indicating that this product is not sold in the South. Scroll down the worksheet to see this row:

	A	B	C	D	E	F	G
1				Measures			
2			Actual		Budget		
3			Qtr1	Qtr2	Qtr1	Qtr2	
4	East	100-10	2461	2940	2550	3050	
5		100-20	212	303	220	300	
6		100-30	74	109	110	130	
7		100	2747	3352	2880	3480	
8		200	562	610	960	1070	
9		Product	5380	6499	6500	7550	
10	West	100-10	1047	1189	1720	1900	
11		100-20	-67	-177	320	200	
12		100-30	62	-163	310	30	
13		100	1042	849	2350	2130	
14		200	2325	2423	2570	2720	
15		Product	7137	7515	8960	9290	
16	South	100-10	745	835	1160	1280	
17		100-20	306	363	570	660	
18		100-30	#Missing	#Missing	#Missing	#Missing	

4   Select **Essbase**, and then **Options**.

5   In **Display**, under **Suppress**, select **#Missing Rows**, and then click **OK**.

6   Select **Essbase**, and then **Retrieve**.

After you change a worksheet option in the Essbase Options dialog box, you must perform a retrieval or drill operation for the setting to take effect.

Essbase suppresses product 100-30 from the South member group.

	A	B	C	D	E	F	G
4	East	100-10	2461	2940	2550	3050	
5		100-20	212	303	220	300	
6		100-30	74	109	110	130	
7		100	2747	3352	2880	3480	
8		200	562	610	960	1070	
9		Product	5380	6499	6500	7550	
10	West	100-10	1047	1189	1720	1900	
11		100-20	-67	-177	320	200	
12		100-30	62	-163	310	30	
13		100	1042	849	2350	2130	
14		200	2325	2423	2570	2720	
15		Product	7137	7515	8960	9290	
16	South	100-10	745	835	1160	1280	
17		100-20	306	363	570	660	
18		100	1051	1198	1730	1940	
19		200	1465	1540	1640	1700	
20		Product	3077	3267	4180	4410	
21	Central	100-10	843	928	1080	1180	

7   Select **File**, and then **Close**.

Do not save the worksheet.

User Reference

Formatting Worksheets

Essbase provides you with various ways to customize the worksheet view. For example, you can apply visual cues, or styles, to certain member names or to data cells in the worksheet. You can display alternative names, or aliases, for member names. This topic steps you through these formatting procedures:

This section of the tutorial starts with a blank worksheet. Make sure you are connected to the Sample Basic database. If you are not connected, follow the steps in

User Reference

Lesson: Applying Styles to Parent Members

To indicate which members contain underlying children, you can apply formatting styles to parent members, including those with attributes.

➤ To apply styles to parent members:

1   Select **File**, and then **New** or click 🗋.

2   Select **Essbase**, and then **Retrieve**.

3   In cell **A2**, drill down (double-click) on Year.

4   Select **Essbase**, and then **Options**.

5   Select **Style**

   Note: The Style page is available only when you are connected to a database.

   Essbase displays the Style page.

In the Members group box, you can define styles for various types of database members, such as parent, child, and shared members.

6   In **Members**, select **Parent**.

Essbase defines a default color of navy for all parent members.

7   Click **Format** to the right of **Members**.

Essbase displays the Font dialog box.

8   In **Font style**, select **Bold Italic**, and then click **OK**.

Essbase displays an example of the selected style in the Sample box.

9   Click **OK** again.

10   Select **Essbase**, and then **Options**.

11   In **Display**, under **Cells**, select **Use Styles** to enable the styles, and then click **OK**.

12   Select **Essbase**, and then **Retrieve**.

Essbase displays parent member names in bold, navy font.

13   In cell **A2**, drill down (double-click) on **Qtr1**.

Essbase displays Jan, Feb, and Mar in a regular font, because these members do not contain underlying children.

	A	B	C	D	E
1		Measures	Product	Market	Scenario
2	Jan	8024			
3	Feb	8346			
4	Mar	8333			
5	Qtr1	24703			
6	Qtr2	27107			
7	Qtr3	27912			
8	Qtr4	25800			
9	Year	105522			

User Reference

"Changing Member Name Fonts and Colors" on page 69

Lesson: Applying Styles to Dimension Members

You can apply styles to members of a dimension in a database. Applying styles to dimensions enables you to easily view the various dimension members in Spreadsheet Add-in.

➤   To apply styles to dimensions:

1   Select **Essbase**, and then **Options**.

2   In **Style**, under **Dimensions**, select **Year**.

3   Select **Cell Border** to create a border around each cell containing a member from the selected dimension.

4   From **Background Color**, select **Yellow**.

5   Click **Format** to the right of **Dimensions**.

The Font dialog box is displayed.

6   From **Font style**, select **Bold**, and then click **OK**.

An example of the selected style is displayed in the Sample box.

7   From the list of dimensions, select **Measures**, and from **Background Color**, select **Fuchsia**.

8   From the list of dimensions, select **Product**, and clear **Cell Border**.

9   From **Background Color**, select **Aqua**.

10   Scroll down the list of dimensions, and select **Market**.

11   Select **Cell Border**, and then click **Format** to the right of **Dimensions**.

12   When **Font** is displayed, from **Font style**, select **Italic**, and then click **OK**.

13   From the list of dimensions, select **Scenario**, and from **Background Color**, select **Red**.

14   Click **Format**, and from **Background Color**, select **White**.

15   Click **OK** twice to return to the worksheet.

16   In cell **D1**, drill down (double-click) on **Market**.

17   Press **Alt** and drill down (double-click) on **Scenario** in cell **E1**.

18   Select **Essbase**, and then **Retrieve**.

Essbase redisplays the worksheet and implements the newly defined styles. For example, members of the Scenario dimension are displayed with a red background.

	A	B	C	D	E	F	G
1			Measures	Product			
2			Actual	Budget	Variance	Variance	Scenario
3	East	Jan	1732	2080	-348	-16.7308	1732
4		Feb	1843	2230	-387	-17.3543	1843
5		Mar	1805	2190	-385	-17.5799	1805
6		Qtr1	5380	6500	-1120	-17.2308	5380
7		Qtr2	6499	7550	-1051	-13.9205	6499
8		Qtr3	6346	7550	-1204	-15.947	6346
9		Qtr4	5936	6790	-854	-12.5773	5936
10		Year	24161	28390	-4229	-14.8961	24161
11	West	Jan	2339	2980	-641	-21.5101	2339
12		Feb	2394	2990	-596	-19.9331	2394
13		Mar	2404	2990	-586	-19.5987	2404
14		Qtr1	7137	8960	-1823	-20.346	7137

User Reference

"Changing Dimension Member Fonts and Colors" on page 70

Lesson: Displaying Aliases for Member Names

You can create reports that use database member names (which are often stock numbers or product codes), or alias names.

For example, members of Product in the Sample Basic database are defined as codes, such as 100 and 200. A descriptive alias for each member of Product, such as Colas and Root Beer, is defined in an alias table. In some cases, alias names may vary depending on the combination of other database members. For example, Product member aliases may differ for each market in which the product is sold.

➤ To display the alias of a member rather than its database name:

1   In cell **C2**, double-click the secondary mouse button to drill up on Actual.

2   Press **Alt** and drill down (double-click) on Product in cell D1.

3   Select **Essbase**, and then **Options**.

4   In **Display**, under **Aliases**, select **Use Aliases**.

5   Under **Alias**, select **Default** .

6   Click **OK**.

7   Select **Essbase**, and then **Retrieve**.

Essbase changes the Product codes (100, 200, and so forth) to their predefined aliases (Colas, Root Beer, Cream Soda, and so forth). In the Sample Basic database, Product is the only dimension with predefined aliases.

	A	B	C	D	E	F	G
1					Measures		
2			Colas	Root Beer	Cream Soda	Fruit Soda	Diet Drinks
3			Scenario	Scenario	Scenario	Scenario	Scenario
4	East	Jan	924	158	184	466	181
5		Feb	888	242	200	513	185
6		Mar	935	162	207	501	189
7		Qtr1	2747	562	591	1480	555
8		Qtr2	3352	610	922	1615	652
9		Qtr3	3740	372	522	1712	644
10		Qtr4	2817	990	592	1537	557
11		Year	12656	2534	2627	6344	2408
12	West	Jan	378	752	755	454	663
13		Feb	337	781	797	479	683
14		Mar	327	792	811	474	679

Notice that Essbase is still displaying the styles that you created and applied in the previous sections.

User Reference

"Displaying Aliases for Members" on page 77

Lesson: Displaying Member Names and Aliases

You can configure Essbase to display aliases and database member names in Spreadsheet Add-in.

➤ To display the name and alias of a member:

1   In cell **B8**, double-click the secondary mouse button to drill up on Qtr2.

2   In cell **C2**, select **Colas**, then select **Essbase**, and then **Pivot**.

3   In cell **C3**. select **Year**, then select **Essbase**, and then **Pivot**.

4   Select **Essbase**, and then **Options**.

5   In **Display**, under **Aliases**, select **Use Both Member Names** and **Aliases for Row Dimensions**.

    Verify that Use Aliases is selected.

6   Click **OK**.

7   Select **Essbase**, and then **Retrieve**.

    Essbase displays member names and their aliases for row dimensions. Because Product is the only row dimension containing preassigned aliases, only the Product members display their aliases. Region members simply repeat the member name instead of displaying an alias.

	A	B	C	D	E	F
1					Year	Measures
2					Scenario	
3	100	Colas	East	East	12656	
4			West	West	3549	
5			South	South	4773	
6			Central	Central	9490	
7			Market	Market	30468	
8	200	Root Beer	East	East	2534	
9			West	West	9727	
10			South	South	6115	
11			Central	Central	9578	
12			Market	Market	27954	
13	300	Cream Soda	East	East	2627	
14			West	West	10731	
15			South	South	2350	

Lesson: Repeating Member Labels

By default, Essbase displays member labels once for each nested row and column group.

You can repeat member labels in each row or column cell that represents a data point, so that you can always see a member label in the worksheet view. This feature is helpful for keeping track of member labels when scrolling through large worksheets.

➤ To repeat member labels down and across the worksheet:

1   Select **Essbase**, and then **Options**.

2 In **Display**, under **Aliases**, clear **Use Both Member Names and Aliases for Row Dimensions**.

3 In **Cells**, select **Repeat Member Labels**, and then click **OK**.

4 In cell E1, drill down (double-click) on **Year**.

Essbase displays a member label in every column and row cell.

	A	B	C	D
1				*Measures*
2				*Scenario*
3	*Qtr1*	*Colas*	*East*	2747
4	*Qtr1*	*Colas*	*West*	1042
5	*Qtr1*	*Colas*	*South*	1051
6	*Qtr1*	*Colas*	*Central*	2208
7	*Qtr1*	*Colas*	*Market*	7048
8	*Qtr1*	*Root Beer*	*East*	562
9	*Qtr1*	*Root Beer*	*West*	2325
10	*Qtr1*	*Root Beer*	*South*	1465
11	*Qtr1*	*Root Beer*	*Central*	2369
12	*Qtr1*	*Root Beer*	*Market*	6721
13	*Qtr1*	*Cream Soda*	*East*	591
14	*Qtr1*	*Cream Soda*	*West*	2363
15	*Qtr1*	*Cream Soda*	*South*	561
16	*Qtr1*	*Cream Soda*	*Central*	2414

5 Before continuing the tutorial, complete these actions:

  a. Select **Essbase**, and then **Options**.

  b. In **Display**, under **Cells**, clear the **Repeat Member Labels**, and then click **OK**.

  c. Select **File**, and then **Close**.

   Do not save the worksheet.

User Reference

"Repeating Member Names" on page 75

Creating Queries Using Query Designer

You can use Essbase Query Designer to define and save database queries for retrieving dimensions and database members into the worksheet. (It is helpful to know which data you want to retrieve from the server.)

These lessons step you through query design procedures:

- "Lesson: Creating Queries" on page 294
- "Lesson: Saving Queries" on page 297
- "Lesson: Applying Queries" on page 297
- "Deleting Queries" on page 100
- "Accessing Help" on page 92

Lesson: Creating Queries

➤ To create a query using Query Designer:

1 Select **Essbase**, and then **Query Designer**.

Essbase displays the Query Designer welcome panel.

2 In the navigation panel, select [Book1]Sheet1, right-click, and select **New**, and then **Query**.

The layout panel of Query Designer is displayed.

3 Define the worksheet layout by dragging the dimension tiles in the properties panel as follows:

a. Drag **Market** and **Product** to the **Row** location.

b. Drag **Measures** to the **Page** location.

c. Drag **Scenario** below **Year** (in the **Column** location).
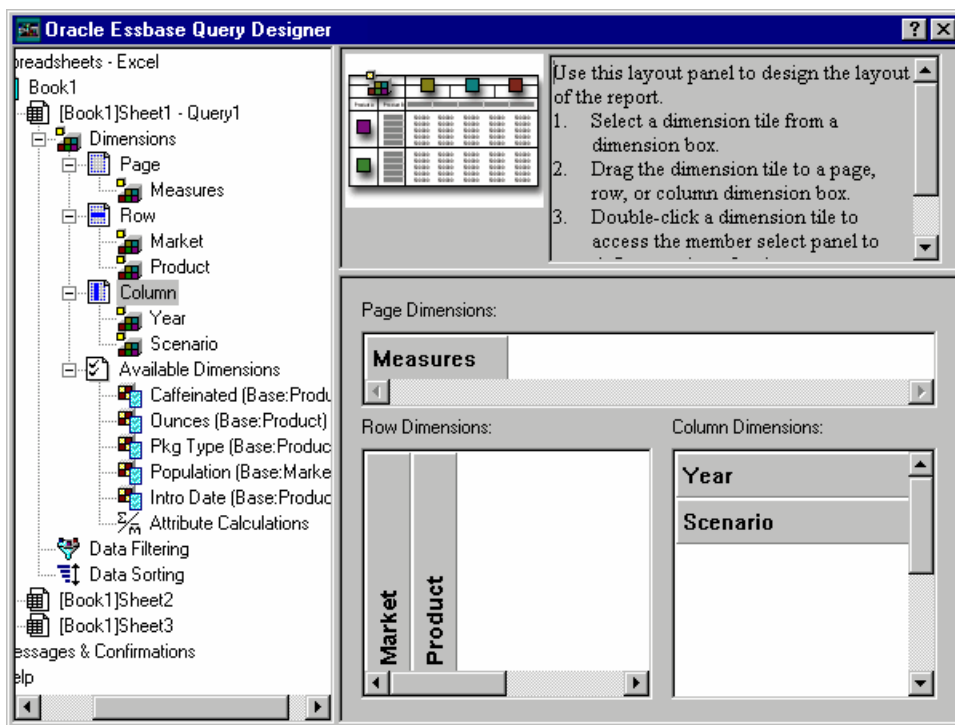
4 In the navigation panel, select the Measures dimension by selecting the Measures icon.

Alternatively, double-click the Measures tile in the layout panel.

The member select properties panel, where you can select a member from the Measures dimension, is displayed.

5 In **Members**, select **Profit**, right-click, and select **Add to Selection Rules**.

Profit is displayed in the Selection Rules list box.

6 Select members of the **Year** dimension as follows:

a. In the navigation panel, click the **Year** icon.

The member select properties panel for the Year dimension is displayed.

b. In **Members**, select **Qtr1**, right-click, and select **Add to Selection Rules**.

c. Add **Qtr2**, **Qtr3**, and **Qtr4** to the selection rules in the same manner.

Because Year is in a Column location, you can select one or more members.
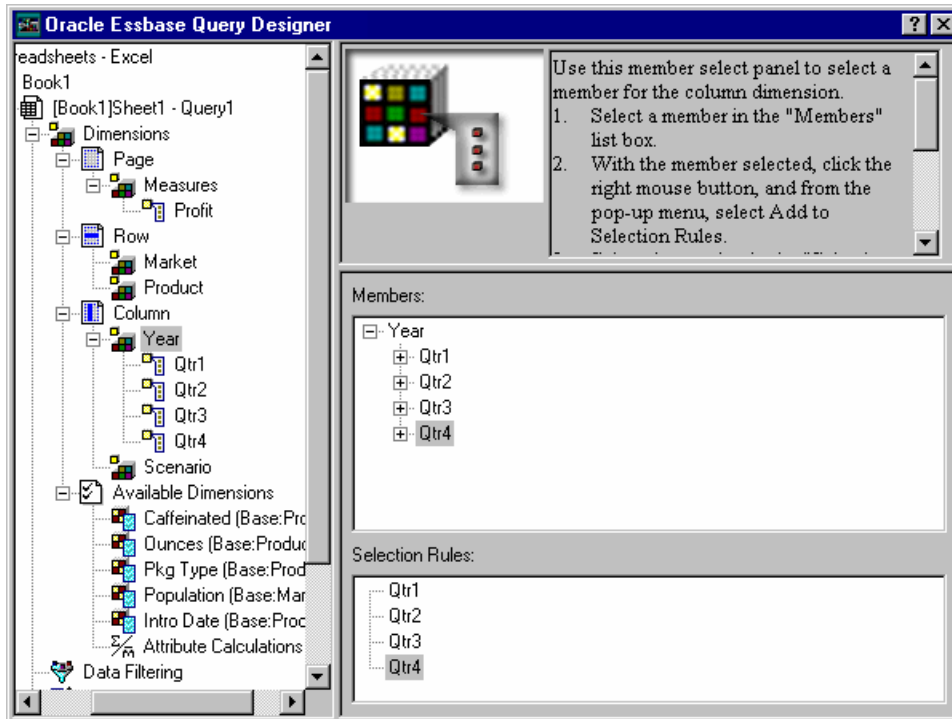
7 Select members of the Scenario dimension as follows:

a. In the navigation panel, select Scenario. Alternatively, double-click the Scenario tile in the layout panel.

The members of the Scenario dimension are displayed in the member select properties panel.

b. Select **Actual**, right-click, and select **Add to Selection Rules**.

Actual is added to the Selection Rules list box.

c. In the same manner, add **Budget** to **Selection Rules**.

8 Select members of the Product dimension as follows:

a. In the navigation panel, select **Product**. Alternatively, double-click the Product tile in the layout panel.

The members of the Product dimension are displayed in the member select properties panel.

b. Select product code **100**, right-click, and select **Add to Selection Rules**.

c. Repeat the process for product codes **200**, **300**, and **400**.

d. In **Selection Rules**, select product code 100, right-click, and then, from the shortcut menu, choose **Select**, and then **Children**.

This action selects all children of 100. All Children is displayed next to 100 in the Selection Rules list box.

e. In **Selection Rules**, select product code 400, right-click, and choose **Select**, and then **Descendants**.

All Descendants is displayed next to 400 in the Selection Rules list box.
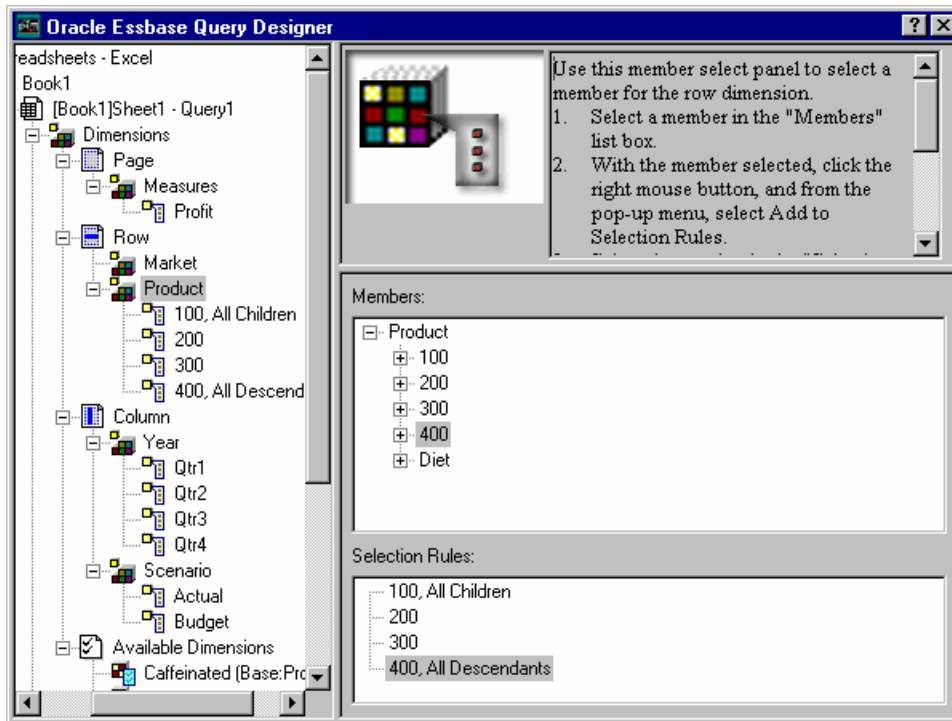
f. To view the list of all product codes to be retrieved into the worksheet, select an entry in **Selection Rules** (for example, 200), right-click, and select **Preview**.

The Member Selection Preview dialog box is displayed with the selected product dimensions listed.

g. Click **Close**.

9 Select members of the Market dimension:

a. In the navigation panel, select **Market**.

Alternatively, double-click the Market tile in the layout panel.

The members of the Market dimension are displayed in the member select properties panel.

b. In **Members**, select **East**, right-click, and select **View by**, and then **Generation**.

c. To pick the second generation of the Market dimension, in **Member**, select **Region**, right-click, and select **Add to Selection Rules**.

Alternatively, double-click Region to add it to the selection rules.

Region is displayed in the Selection Rules list box.

d. To view the list of members to be retrieved into the worksheet, in **Selection Rules**, select **Region**, right-click, and select **Preview**.

East, West, South, and Central, which are members of generation two in Market, are displayed in the Member Selection Preview dialog box.

e. Click **Close**, or press Alt+C.

You defined a basic query. The outline of the query is displayed in the navigation panel.

User Reference

"Creating Queries" on page 96

Lesson: Saving Queries

➤ To save a query in Query Designer:

1   In the navigation panel, select [Book1]Sheet1, Query1, and then right-click and select **Save Query**.

The Query Designer Save As Query dialog box is displayed. You can save your query to the server or to your computer.

2   In **Location**, select **Client**.

3   Click **File System**.

The Save As dialog box is displayed.

4   Select a location, and in **File name** , enter `Basic1`, and then click **Save**.

Query Designer displays information about the query that you just saved.

You use the Basic1 query again in Appendix B, "Advanced Tutorial."

User Reference

"Saving Queries" on page 99

Lesson: Applying Queries

➤ To apply a query in Query Designer:

1   In the navigation panel, select [Book1]Sheet1, Basic1.

2   Right-click the Basic1 query, and select **Apply Query**.

The result of the query is displayed in the worksheet.

	A	B	C	D	E	F	G	H	I	J
1						Profit				
2			Qtr1		Qtr2		Qtr3		Qtr4	
3			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
4	East	Cola	2461	2550	2940	3050	3298	3440	2430	2410
5		Diet Cola	212	220	303	300	312	310	287	290
6		Caffeine Free Cola	74	110	109	130	130	190	100	150
7		Root Beer	562	960	610	1070	372	830	990	1500
8		Cream Soda	591	770	922	1010	522	660	592	530
9		Grape	645	840	676	860	710	920	618	800
10		Orange	290	350	327	380	377	420	394	440
11		Strawberry	545	700	612	750	625	780	525	670
12	West	Cola	1047	1720	1189	1900	1339	2120	1018	1780
13		Diet Cola	-67	320	-177	200	-154	250	-136	320
14		Caffeine Free Cola	62	310	-163	30	-286	-130	-123	70
15		Root Beer	2325	2570	2423	2720	2540	2820	2439	2840
16		Cream Soda	2363	2620	2739	2970	2937	3230	2692	2850
17		Grape	1143	920	1167	960	1271	1020	1219	920
18		Orange	1002	810	1120	890	1192	1000	940	680
19		Strawberry	-738	-310	-783	-380	-900	-440	-779	-400
20	South	Cola	745	1160	835	1280	1031	1490	965	1510
21		Diet Cola	306	570	363	660	281	570	247	550

User Reference

Applying Worksheet Options to Query Designer Results

You can apply worksheet options that you previously set from the Essbase Options dialog box to the results of a query created in Query Designer.

➤ To enable Query Designer to use the previously set worksheet options:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**.

3 Select **Use Sheet Options with Query Designer**, and select **OK**.

4 Select **Essbase**, and then **Retrieve**.

Essbase displays the results of the query that you created in Query Designer and implements the previously set worksheet options. Aliases, instead of the numeric codes, are now displayed for the Product dimension.

	A	B	C	D	E	F	G	H	I	J
1						Profit				
2			Qtr1		Qtr2		Qtr3		Qtr4	
3			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
4	East	Cola	2461	2550	2940	3050	3298	3440	2430	2410
5		Grape	645	840	676	860	710	920	618	800
6		Cream Soda	591	770	922	1010	522	660	592	530
7		Root Beer	562	960	610	1070	372	830	990	1500
8		Strawberry	545	700	612	750	625	780	525	670
9		Orange	290	350	327	380	377	420	394	440
10		Diet Cola	212	220	303	300	312	310	287	290
11		Caffeine Free Cola	74	110	109	130	130	190	100	150
12	West	Cream Soda	2363	2620	2739	2970	2937	3230	2692	2850
13		Root Beer	2325	2570	2423	2720	2540	2820	2439	2840
14		Grape	1143	920	1167	960	1271	1020	1219	920
15		Cola	1047	1720	1189	1900	1339	2120	1018	1780
16		Orange	1002	810	1120	890	1192	1000	940	680
17		Caffeine Free Cola	62	310	-163	30	-286	-130	-123	70
18		Diet Cola	-67	320	-177	200	-154	250	-136	320
19		Strawberry	-738	-310	-783	-380	-900	-440	-779	-400
20	South	Root Beer	1465	1640	1540	1700	1612	1710	1498	1330

5 Select **File**, and then **Close**.

Do not save the worksheet.

Lesson: Selecting Members

Member selection is an important method of creating a spreadsheet report for the data to retrieve. The Essbase Member Selection dialog box enables you to find and select members and to define the layout of members in the worksheet. Boolean operators and other search parameters enable you to specify criteria and conditions that members must meet for member selection.

Make sure you are connected to the Sample Basic database. If you are not connected, follow the steps in "Lesson: Connecting to a Database" on page 270.

➤ To view members from the Product dimension:

1 Select **File**, and then **New** or click [ ].

2 Select **Essbase**, and then **Retrieve**.

3 To display Product as a row dimension, rather than as a column dimension, select **Product**, then **Essbase**, and then **Pivot** .

	A	B	C	D	E	F
1			Measures	Market	Scenario	
2	Product	Year	105522			
3						
4						
5						

4 Select **Product**, then **Essbase**, and then **Member Selection**.

In the Essbase Member Selection dialog box, Product is displayed in the Dimension list, and its children are displayed in the Members list box.

5   Select Colas, and then click **Member Information**.

The Member Information dialog box provides information about the selected member, such as dimension, generation, level, storage setting, formula, UDAs, and member comments.

6   Click **OK**.

7   In **Essbase Member Selection**, click **Add** to add Colas to **Rules**.

Alternatively, you can double-click an item in the Members list box to add the item.

8   Select **Product**, and then click **Find**.

The Find Member dialog box is displayed.

In the Find Member dialog box, you can do pattern-match searches for members in the selected dimension. You can use wildcard patterns—trailing asterisk *, and single-character match, ?. Essbase locates the members that match the text string and groups them in outline order, so that they can be selected as a group.

> **Note:**   You can use the trailing asterisk wildcard and single-character wildcard in the text string. The * wildcard replaces a string of characters, and the ? wildcard replaces one character. J?n and 100* are examples of valid wildcard strings; *-10 and J*n are examples of invalid wildcard strings.

9   In **Find Member**, enter `D*`.

10   Click **Find**.

Essbase selects the first descendent in the dimension whose name begins with the letter D.

11   Click **Find Next**.

The next member in the Product dimension whose name begins with the letter D is selected.

12   Continue to click **Find Next** until all members and descents of the Product dimension whose names begin with the letter D are selected.

13   Click **Close**.

14   Click **Diet Cream** once to clear all other selected members and descendants, and then click **Add**.

Colas and Diet Cream are displayed in the Rules list box.

15   In **Essbase Member Selection**, select **Colas** in **Rules**, right-click, and from the shortcut menu, select **All Children and Member**.

All Children and Member are displayed next to Colas in the Selection Rules list box.

16   In **Selection Rules**, select Colas, All Children and Member, and right-click.

17   From the shortcut menu, select **Subset**.

The Subset Dialog box, where you can further define conditions for the selected member, is displayed.

18   In **Subset Dialog**, from the list on the left, select **Caffeinated**. From the list in the middle, select **Is**. From the list on the right, select **Caffeinated_True**.

19 Click **Add as AND Condition.**

Caffeinated = Caffeinated_True is displayed in the Conditions list box.

When you use Add as AND Condition, the subsetting condition in the Conditions list box is evaluated using AND logic (the selection must meet the current condition and the condition that follows it).

20 From the list on the left, select Ounces. From the list in the middle, select the logical operator "**=**". From the list on the right, select **Ounces_12**.

21 Click **Add as AND Condition.**

Ounces = Ounces_12 is displayed in the Conditions box.

22 From the list on the left, select Ounces. From the list in the middle, select the logical operator "**<=**". From the list on the right, select **Ounces_32**.

23 Click **Add as OR Condition.**

Ounces <= Ounces_32 is displayed in the Conditions box.

When you use Add as OR Condition, the subsetting condition in the Conditions list box is evaluated using OR logic (the selection must meet the current condition *or* the condition that follows it).

24 From the list on the left, select **Pkg Type**. From the list in the middle, select **Is**. From the list on the right, select **Bottle**.

25 Click **Add as AND Condition.**

Pkg Type = Bottle is displayed in the Conditions list box.

26 In **Conditions**, select **Ounces <= Ounces_32**, and then click **Add (.**

27 Select **Pkg Type = Bottle**, and then click **Add).**

The Add (and Add) buttons add a left parenthesis and right parenthesis, respectively, to selected items. Use parentheses for grouping multiple subsetting conditions to determine the order of priority for analyzing the conditions.

Each item in the Conditions list box can contain the left or right parenthesis, but not both. In this example, Essbase first evaluates members that are less than or equal to 32 ounces and are packaged in a bottle. Essbase evaluates the results from this condition against members that are 12 ounces.

> **Note:** Use the Remove ( ) button to remove an individual group of parentheses from a selected item in the Conditions list box. Use the Remove All ( ) button to remove all parenthetical groupings from the Conditions list box.

The Subset Dialog box is displayed .

28 Click **Preview.**

In the Member Preview dialog box, you can view the resulting member selection from the conditions that you defined.

29 Click **Close**.

30 Click **OK** to close **Subset** and return to **Essbase Member Selection**.

The conditions that you set in the Subset dialog box are displayed in the Rules list box.

31 Select **Diet Cream**, and then click **Move Item Up** to change the order in which Diet Cream is displayed in the worksheet.

Each time you click the Move Item Up or Move Item Down button, the selected item and its associated subset conditions move up or down one position in the Rules list box. You can move only the top-level item (the item you added from the Members list box), not the individual subset conditions.

32 Click **Preview**.

The Member Preview dialog box is displayed.

33 After previewing the list, click **Close**.

34 Click **OK** to close **Essbase Member Selection** and insert the members into the worksheet.

	A	B	C	D	E	
1			Measures	Market	Scenario	
2	Diet Cream	Year	105522			
3	Cola					
4	Diet Cola					
5	Caffeine Free Cola					

Note: The FlashBack command cannot undo a Member Selection action.

35 Starting with Diet Cream, enter `Year` next to each product.

You must perform this step so that every product is associated with a matching Year dimension in the report.

	A	B	C	D	E	
1			Measures	Market	Scenario	
2	Diet Cream	Year	105522			
3	Cola	Year				
4	Diet Cola	Year				
5	Caffeine Free Cola	Year				

36 Select **Essbase**, and then **Retrieve**.

Essbase retrieves data for the members that you selected and applies the styles that you previously set.

	A	B	C	D	E	
1			Measures	Market	Scenario	
2	Diet Cream	Year	11093			
3	Cola	Year	22777			
4	Diet Cola	Year	5708			
5	Caffeine Free Cola	Year	1983			

User Reference

Chapter 9, "Selecting Members"

Lesson: Disconnecting from Essbase

When you finish retrieving and navigating through data, disconnect from the server to decrease user count and to enable other Spreadsheet Add-in users access to that port.

➤ To disconnect from the server:

1 Select **Essbase**, and then **Disconnect**.

   The Essbase Disconnect dialog box is displayed; from which you can disconnect worksheets that are connected to a database.

2 From the list, select a worksheet name, and then click **Disconnect**.

3 Repeat step 2 until you disconnect all active sheets.

4 Click **Close**.

> **Note:** You can also disconnect from the server by closing the spreadsheet application. An abnormal shutdown of a Spreadsheet Add-in session, such as a power loss or system failure, does not disconnect the server connection.

User Reference

"Logging Off Essbase" on page 23

On to Advanced Tasks

Now that you completed the basic tutorial, you can move on to more complex tasks. In the next tutorial, you use the sample spreadsheet files to perform advanced tasks in Spreadsheet Add-in.

B

Advanced Tutorial

About the Advanced Tutorial

The tutorial that you completed in Appendix A teaches basic data retrieval and navigation concepts for Spreadsheet Add-in. This tutorial builds on your basic skills and expands your knowledge of Essbase and Spreadsheet Add-in.

In this advanced tutorial, you use several sample spreadsheet files for Excel that were installed as part of the default Essbase installation. These files are stored in *EPM_ORACLE_HOME*/ `products/Essbase/EssbaseClient/client/sample`. You also reconnect to the Sample Basic database.

Before you begin the advanced tutorial, complete the steps in the next sections, "Advanced Tutorial Prerequisites" on page 305. See also "Tutorial Guidelines" on page 268 and "About the Sample Basic Database" on page 269 for important information about what you should expect as you perform the tutorial steps.

Advanced Tutorial Prerequisites

Complete these tasks before starting the advanced tutorial:

- "Connecting to a Database" on page 306
- "Setting Essbase Options" on page 306

Connecting to a Database

To access Essbase data for the advanced tutorial, first connect to the Sample Basic database on the server. This tutorial assumes that you can connect to a server, an application, and a database.

➤ To connect to an Essbase Server, Essbase application and database:

1 Select **Essbase**, and then **Connect**.

The Essbase System Login dialog box is displayed.

> **Note:** To complete the steps that follow, you must know the name of the Essbase Server, your user name, and your password. If you do not know this information, contact the Essbase system administrator.

2 From **Server**, select the server to access or enter the name of the server.

3 Enter your **user name**.

4 Enter your **password**.

> **Note:** You can change your password when you are connected to a server. See "Changing Passwords" on page 24.

5 Click **OK**.

Essbase displays a list of available application and database pairs in the Application/Database list box. An instance of Essbase Server enables simultaneous access to multiple applications. An application can contain multiple databases. Only the databases that you are permitted to access are displayed in the list.

For this tutorial, you use the Sample Basic database. If the Sample Basic database was installed as part of the Essbase installation, it is shown in the list. If Sample Basic is not shown in the Application/Database list box, ask the Essbase system administrator to install it.

6 Select **Sample Basic**, and then click **OK**.

If the application is not running, Essbase automatically starts it. may pause briefly as the application loads; the time required to start an application depends on the number of databases, the sizes of the databases, and the sizes of the indexes of the databases that are contained within the applications.

Setting Essbase Options

Before you begin the tutorial, ensure that the worksheet options are set to the initial settings described in the following procedure.

➤ To set Essbase display options:

1 Select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**, and then select only these Display options:

- Indentation—Totals

- Cells—Use Styles

- Replacement—#Missing Label: N/A

- Aliases

  - Use Aliases

  - Aliases—Default

-

- Query Designer—Use Sheet Options with Query Designer

Clear all other Display options.

3 Select **Zoom**, and then select only these options:

- Zoom In—Next Level

- Member Retention—Include Selection

- Sampling Percentation—100

Clear all other Zoom options.

4 Select **Mode**, and then select only Advanced Interpretation.

Clear all other Mode options.

5 Select **Global**, and select only these options:

- Mouse Actions—Select all Mouse Action options

- Memory—Enable Feedback

- Display Messages—Errors

- Log File—Select both Log File options

-

-

-

Clear all other Global options.

6 Select **OK**.

The settings in the Essbase Options dialog box may change as you access the various sample spreadsheet files as part of the tutorial. Leave the settings as they are unless the tutorial advises you to change them. If your option settings differ, the illustrations presented in this chapter may not match the worksheet view.

Performing Advanced Retrieval Tasks

The tutorial in Appendix A describes how to perform basic data retrieval and navigation tasks in Spreadsheet Add-in. These are the advanced retrieval tasks discussed in this chapter:

- "Lesson: Filtering Data" on page 308
- "Lesson: Sorting Data" on page 311
- "Retrieving Data into Asymmetric Reports" on page 313
- "Working with Formatted Worksheets" on page 314
- "Lesson: Preserving Formulas When Retrieving Data" on page 318
- "Lesson: Retrieving a Range of Data" on page 320
- "Lesson: Retrieving Data Using Functions" on page 322
- "Lesson: Retrieving Dynamic Calc Members" on page 325
- "Lesson: Using Dynamic Time Series" on page 326
- "Using Free-Form Reporting to Retrieve Data" on page 327
- "Lesson: Retrieving Data Using Visual Explorer" on page 334

Lesson: Filtering Data

Essbase Query Designer includes powerful data filtering and sorting capabilities. To become familiar with these capabilities, you use the Basic1 query that you created and saved in Appendix A, "Basic Tutorial."

Note: If you skipped the basic tutorial, follow the steps in "Creating Queries Using Query Designer" on page 293 to create and save the Basic1 query.

➤ To filter and sort data:

1 Select **Essbase**, and then **Query Designer**.

   The query information panel of Query Designer is displayed.

2 In the navigation panel, select [Book1]Sheet1.

3 Right-click and select **Open Query**.

   The Open Query dialog box is displayed.

4 From the location that you previously specified, select the `Basic1` file.

5 Click **OK**.

   The member selection, displayed in the properties panel, remains unaltered from the last Query Designer session.

6 From the navigation panel, select **Data Filtering**.

Essbase displays the data filter settings in the data filter panel. The filter controls the number of data rows that are retrieved. The number is based on the column criteria that you define. You can define data filtering criteria on data values that reside in one or more columns of the view.

7   Select **Top**, and in **Rows**, enter a value of 30 .

When you apply the query, Essbase retrieves the top thirty rows of the dimension.

8   From **Dimension being ranked**, select **Product**.

Product is the dimension to which ranking should be applied.

9   From **Column used for ranking**, select **Qtr1, Actual**.

Qtr1, Actual is the column on which data values are based.

10 In the navigation panel, select **Data Filtering**, right-click, and then select **Apply Query**.

	A	B	C	D	E	F	G	H	I	J
1						Profit				
2			Qtr1		Qtr2		Qtr3		Qtr4	
3			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
4	East	Cola	2461	2550	2940	3050	3298	3440	2430	2410
5		Grape	645	840	676	860	710	920	618	800
6		Cream Soda	591	770	922	1010	522	660	592	530
7		Root Beer	562	960	610	1070	372	830	990	1500
8		Strawberry	545	700	612	750	625	780	525	670
9		Orange	290	350	327	380	377	420	394	440
10		Diet Cola	212	220	303	300	312	310	287	290
11		Caffeine Free Cola	74	110	109	130	130	190	100	150
12	West	Cream Soda	2363	2620	2739	2970	2937	3230	2692	2850
13		Root Beer	2325	2570	2423	2720	2540	2820	2439	2840
14		Grape	1143	920	1167	960	1271	1020	1219	920
15		Cola	1047	1720	1189	1900	1339	2120	1018	1780
16		Orange	1002	810	1120	890	1192	1000	940	680
17		Caffeine Free Cola	62	310	-163	30	-286	-130	-123	70
18		Diet Cola	-67	320	-177	200	-154	250	-136	320
19		Strawberry	-738	-310	-783	-380	-900	-440	-779	-400
20	South	Root Beer	1465	1640	1540	1700	1612	1710	1498	1330
21		Cola	745	1160	835	1280	1031	1490	965	1510
22		Cream Soda	561	810	529	770	591	840	669	930
23		Diet Cola	306	570	363	660	281	570	247	550
24	Central	Cream Soda	2414	2770	2579	2930	2648	2980	2450	2690
25		Root Beer	2369	3310	2457	3350	2481	3470	2271	4130
26		Grape	1050	1030	1155	1120	1220	1150	970	890
27		Orange	991	910	1075	1020	1073	1010	1070	890
28		Diet Cola	908	1130	1045	1320	1089	1340	889	1180

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You can further filter the data output by specifying data comparison operations in the Data Restrictions list box.

11 In the navigation panel, select **Data Filtering**.

The data filters that you specified are displayed in the properties panel.

12 In **Data Restrictions**, double-click.

The data restriction settings are displayed in the properties panel.

13 Select **A value of**, and enter `500` in **value**.

Observe that the "is" option in Data is changed to =.

14 Click the down arrow of **Data**, and select **<=**.

15 Click the down arrow of **Column used for filter**, and select **Qtr1, Actual**.

16 In the navigation panel, select **Data Filtering**, right-click, and select **Apply Query**.

Notice that the query results now reflect only Actual and Budget data that are less than or equal to 500.

17 In the navigation panel, select **Data Filtering** to display the data filter setting in the properties panel.

18 In **Data Restrictions**, select **Qtr1, Actual <= 500**, right-click, and select **New Data Restriction**.

19 In **Data**, click the down arrow and select **<**.

20 Select **the data values in**, and select **Qtr2, Actual**.

21 Under **Combined With Other Restrictions**, select the **Or** option.

22 In the navigation panel, click **Data Filtering** to access the data filter panel.

23 In **Data Restrictions**, double-click to create a data restriction.

24 In **Data**, click the down arrow and select **is not**.

25 Click **#Missing Value**.

This option instructs Essbase to discard data with #Missing values.

26 In **Column used for filter**, select **Qtr1, Actual**.

27 Under **Combined With Other Restrictions**, select the **And** option.

28 In the navigation panel, click **Data Filtering** to access the data filter panel.

29 Select the **Data Filtering** icon, right-click, and select **Apply Query**.

Essbase retrieves data for all quarters. Notice that the retrieved data for Qtr1, Actual is less than or equal to 500 or is less than Qtr2, Actual.

	A	B	C	D	E	F	G	H	I	J
1						Profit				
2			Qtr1		Qtr2		Qtr3		Qtr4	
3			Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
4	East	Cola	2461	2550	2940	3050	3298	3440	2430	2410
5		Grape	645	840	676	860	710	920	618	800
6		Cream Soda	591	770	922	1010	522	660	592	530
7		Root Beer	562	960	610	1070	372	830	990	1500
8		Strawberry	545	700	612	750	625	780	525	670
9		Orange	290	350	327	380	377	420	394	440
10		Diet Cola	212	220	303	300	312	310	287	290
11		Caffeine Free Cola	74	110	109	130	130	190	100	150
12	West	Cream Soda	2363	2620	2739	2970	2937	3230	2692	2850
13		Root Beer	2325	2570	2423	2720	2540	2820	2439	2840
14		Grape	1143	920	1167	960	1271	1020	1219	920
15		Cola	1047	1720	1189	1900	1339	2120	1018	1780
16		Orange	1002	810	1120	890	1192	1000	940	680
17		Caffeine Free Cola	62	310	-163	30	-286	-130	-123	70
18		Diet Cola	-67	320	-177	200	-154	250	-136	320
19		Strawberry	-738	-310	-783	-380	-900	-440	-779	-400
20	South	Root Beer	1465	1640	1540	1700	1612	1710	1498	1330
21		Cola	745	1160	835	1280	1031	1490	965	1510
22		Diet Cola	306	570	363	660	281	570	247	550
23	Central	Cream Soda	2414	2770	2579	2930	2648	2980	2450	2690
24		Root Beer	2369	3310	2457	3350	2481	3470	2271	4130
25		Grape	1050	1030	1155	1120	1220	1150	970	890
26		Orange	991	910	1075	1020	1073	1010	1070	890
27		Diet Cola	908	1130	1045	1320	1089	1340	889	1180
28		Cola	843	1080	928	1180	915	1170	793	1060
29		Caffeine Free Cola	457	620	500	610	556	690	567	730
30		Strawberry	77	90	87	90	130	140	205	210

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User Reference

"Creating Data Filters" on page 114

Lesson: Sorting Data

In the data sort panel, you can sort the output from the Basic1 query in ascending or descending order.

➤ To sort the query:

1   From the navigation panel, select the **Data Sorting** icon.

2   Double-click on **(double click to create a new sort rule)**.

    The selection defaults to Qtr1, Actual. The sort order defaults to Ascending in the Ordering list box.

3   Click **Ascending**.

    A down arrow is displayed next to Ascending.

4   Click the down arrow next to **Ascending**.

    Descending is displayed below Ascending in the properties panel.

5 In **Ordering**, select **Descending**.

6 Double-click on **(double click to create a new sort rule)**.

A data sorting rule is added. The selection defaults to Qtr1, Actual.

7 Click the down arrow next to **Qtr1, Actual** and select **Qtr1, Budget**.

Observe that the order defaults to Ascending.

8 In the navigation panel, under **Data Sorting**, select **Ascending, Qtr1, Budget**, right-click, and select **Delete Sorting Rule**.

The Ascending, Qtr1, Budget sorting rule is deleted from the query.

9 In the navigation panel, select **Data Sorting**, right-click, and select **Apply Query**.

Essbase returns the results sorted in descending order for each quarter:

	B	C	D	E	F	G	H	I	J
1					Profit				
2		Qtr1		Qtr2		Qtr3		Qtr4	
3		Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
4	Cola	2461	2550	2940	3050	3298	3440	2430	2410
5	Grape	645	840	676	860	710	920	618	800
6	Cream Soda	591	770	922	1010	522	660	592	530
7	Root Beer	562	960	610	1070	372	830	990	1500
8	Strawberry	545	700	612	750	625	780	525	670
9	Orange	290	350	327	380	377	420	394	440
10	Diet Cola	212	220	303	300	312	310	287	290
11	Caffeine Free Cola	74	110	109	130	130	190	100	150
12	Cream Soda	2363	2620	2739	2970	2937	3230	2692	2850
13	Root Beer	2325	2570	2423	2720	2540	2820	2439	2840
14	Grape	1143	920	1167	960	1271	1020	1219	920
15	Cola	1047	1720	1189	1900	1339	2120	1018	1780
16	Orange	1002	810	1120	890	1192	1000	940	680
17	Caffeine Free Cola	62	310	-163	30	-286	-130	-123	70
18	Diet Cola	-67	320	-177	200	-154	250	-136	320
19	Strawberry	-738	-310	-783	-380	-900	-440	-779	-400
20	Root Beer	1465	1640	1540	1700	1612	1710	1498	1330
21	Cola	745	1160	835	1280	1031	1490	965	1510
22	Diet Cola	306	570	363	660	281	570	247	550
23	Cream Soda	2414	2770	2579	2930	2648	2980	2450	2690
24	Root Beer	2369	3310	2457	3350	2481	3470	2271	4130
25	Grape	1050	1030	1155	1120	1220	1150	970	890
26	Orange	991	910	1075	1020	1073	1010	1070	890
27	Diet Cola	908	1130	1045	1320	1089	1340	889	1180
28	Cola	843	1080	928	1180	915	1170	793	1060
29	Caffeine Free Cola	457	620	500	610	556	690	567	730
30	Strawberry	77	90	87	90	130	140	205	210

Sheet1 / Sheet2 / Sheet3 /

10 To close the worksheet, select **File**, and then **Close**.

Do not save the worksheet.

Retrieving Data into Asymmetric Reports

Asymmetric reports are characterized by groups of nested members that differ by at least one member. The number of members or the names of members can differ.

-
-

Lesson: Viewing Asymmetric Reports

As part of the default Essbase installation, the `Asymm.xlsl` sample file is provided that illustrates how to create asymmetric reports.

➤ To view the sample file, `Asymm.xls`:

1 Select **File**, and then **Open**.

2 From *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open** `Asymm.xls`.

Depending on how software is installed on your computer, the file may not be available or may be in another directory. Contact the Essbase system administrator.

	A	B	C	D	E	F	G
1	Sales						
2							
3			*Actual*	*Budget*	*Budget*	*Budget*	
4			Qtr1	Qtr2	Qtr3	Qtr4	
5	East	Colas	6292	6760	7300	5570	
6		Root Beer	5726	5650	5600	5780	
7		Fruit Soda	3735	4150	4350	3850	
8							
9	West	Root Beer	8278	7970	8320	7820	
10		Cream Soda	8043	7720	8300	7570	

The sample file row and column dimension groups are asymmetric. Thus, the nested member groups from the Product dimension differ in member content within respective markets. For example, Colas and Fruit Soda are included in East but not in West. In addition, Actual data is displayed for Qtr1, whereas Budget data is displayed for Qtr2, Qtr3, and Qtr4. Also notice that the sample file displays styles for members of the Scenario and Year dimensions.

3 Leave the sample file open for the next lesson.

Lesson: Pivoting in Asymmetric Reports

When you pivot a group of members in an asymmetric report, Essbase keeps only unique members from dimensions that are not involved in the pivot.

➤ To use the open `Asymm.xls` file to illustrate this point:

1 Using the right-mouse button, drag East to the cell below Qtr1.

	A	B	C	D	E	F	G	H	I
1					Sales				
2									
3		*Actual*		*Budget*		*Budget*		*Budget*	
4		Qtr1		Qtr2		Qtr3		Qtr4	
5		East	West	East	West	East	West	East	West
6	Colas	6292	6950	6760	8800	7300	9100	5570	8430
7	Root Beer	5726	8278	5650	7970	5600	8320	5780	7820
8	Fruit Soda	3735	8403	4150	5840	4350	6070	3850	5280
9	Cream Soda	4868	8043	4030	7720	3850	8300	3170	7570

Essbase combines the Product members into all unique members. For example, Root Beer is displayed once in the current view, instead of twice. Colas is displayed in East and West, instead of in only one market.

Essbase also removes the blank line between Product row groups. A pivot action eliminates rows or columns in which all cells are empty.

2 Close the sample file without saving the changes.

Working with Formatted Worksheets

After you format and save a worksheet, you can retrieve and navigate through new data in the existing worksheet format. These topics provide information on working with formatted worksheets:

Retrieving Data into Formatted Worksheets

As part of the default Essbase installation, the `P&l.xls` sample file is provided that illustrates how to retrieve data into a worksheet containing formatted text, formulas, and protected cells.

➤ To view the `P&l.xls` worksheet:

1 Select File, and then Open.

2 From *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open** `P&l.xls`.

	A	B	C	D	E	F	G	H
1	**Market:** Central					**The Beverage Company**		
2	**Product:** 200					Planning Dept.		
3	**Scenario:** Budget							
4								
5		**Jan**	**Feb**	**Mar**		**Qtr1**	**% Sales**	
6	Misc	5	10	10		25	0.30	
7	Payroll	200	200	200		600	0.07	
8	Marketing	350	350	350		1050	12.47	
9	Total Expenses	555	560	560		1675	19.89	
10								
11	COGS	1170	1180	1200		3550	42.16	
12	Sales	2740	2820	2860		8420	100.00	
13	Margin	1570	1640	1660		4870	57.84	
14	Profit	1015	1080	1100		3195	37.95	
15								
16	Ratio Analysis							
17	Markup	57.3%	58.2%	58.0%		57.8%		
18	Marketing %	12.8%	12.4%	12.2%		12.5%		

Note: Depending on how software is installed on your computer, the file may not be available or may be in another directory. Contact the Essbase system administrator.

3 Select **Essbase**, and then **Options**.

4 In **Display**, under **Cells**, ensure that **Adjust Columns** is selected.

5 Select **Mode**.

6 In **Formula Preservation**, select **Retain on Retrieval** to enable Formula Preservation mode.

7 Click **OK**.

8 Select **Essbase**, and then **Retrieve**.

Essbase determines that some text cells in the worksheet do not correspond to database member names. When Essbase is unable to resolve text in the worksheet, an unknown member message is displayed. In this example, the first unknown member detected is Market: (in cell A1).

9 Click **No**.

Essbase retrieves data but retains the formatting and formulas in the worksheet.

	A	B	C	D	E	F	G	H
1	**Market:** Central					**The Beverage Company**		
2	**Product:** 200					Planning Dept.		
3	**Scenario:** Budget							
4								
5		**Jan**	**Feb**	**Mar**		**Qtr1**	**% Sales**	
6	Misc	#Missing	#Missing	#Missing		0	0.00	
7	Payroll	210	210	210		630	0.07	
8	Marketing	300	310	320		930	11.05	
9	Total Expenses	510	520	530		1560	18.53	
10								
11	COGS	1170	1180	1200		3550	42.16	
12	Sales	2740	2820	2860		8420	100.00	
13	Margin	1570	1640	1660		4870	57.84	
14	Profit	1060	1120	1130		3310	39.31	
15								
16	Ratio Analysis							
17	Markup	57.3%	58.2%	58.0%		57.8%		
18	Marketing %	10.9%	11.0%	11.2%		11.0%		

10 Close the file without saving it.

> **Note:** The section on "Lesson: Preserving Formulas When Retrieving Data" on page 318 provides additional tutorial tasks that show you how to leverage all Formula Preservation options.

User Reference

Lesson: Pivoting Data on Formatted Worksheets

As part of the default Essbase installation, the `Inv.xls` sample file is provided which illustrates how to pivot data in a formatted worksheet. The sample file was saved with the Retain on Retrieval option disabled so that you can pivot on its worksheets.

➤ To pivot data in the `Inv.xls` worksheet:

1 Select **File**, and then **Open**.

2 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** `Inv.xls`.

	A	B	C	D	E	F	G
1	Market		*Inventory Analysis*				
2	Actual						
3			Jan	Feb	Mar		Qtr1
4							
5	Sales	100	8314	8327	8407		25048
6		200	8716	8960	8951		26627
7		300	7874	8046	8077		23997
8		400	6634	6736	6778		20148
9		Product	31538	32069	32213		95820
10							
11	Opening Inventory	100	29448	29124	28929		29448
12	* Adjusted for Audit	200	33000	32100	31125		33000
13		300	28865	28964	29095		28865
14		400	26092	26246	26409		26092
15		Product	117405	116434	115558		117405
16							
17	Stock to Sales		3.72	3.63	3.59		
18			=====	=====	=====		

Note: Depending on how software is installed on your computer, the file may not be available or may be in another directory. Contact the Essbase system administrator for the location of the file.

3 Select **Essbase**, and then **Options**.

4 In **Global**, under **Display Messages** , clear **Display Unknown Members** to avoid seeing the Essbase messages when working with formatted worksheets, and then click **OK**.

5 Using the right-mouse button, drag **Sales** (in cell **A5**) to the cell nested below **Jan (C4)**.

Essbase pivots the Sales member group so that it is nested below the monthly members. During the pivot, however, Essbase retains only database elements. For example, all data for Stock to Sales and Adjusted for Audit is deleted during the pivot.

	A	B	C	D	E	F	G
1			*Inventory Analysis*		Market		
2					Actual		
3		Jan		Feb		Mar	
4		Sales	Opening Inventory	Sales	Opening Inventory	Sales	Opening Inventory
5							
6	100	8314	29448	8327	29124	8407	28929
7	200	8716	33000	8960	32100	8951	31125
8	300	7874	28865	8046	28964	8077	29095
9	400	6634	26092	6736	26246	6778	26409
10	Product	31538	117405	32069	116434	32213	115558
11							
12	* Adjusted for Audit						
13							
14							
15							
16							
17	Stock to Sales						
18			=====	: : =====		=====	

6 Close the file without saving it.

Lesson: Preserving Formulas When Retrieving Data

In "Retrieving Data into Formatted Worksheets" on page 314, you used the Retain on Retrieval option to preserve formatting and formulas in a worksheet. This topic shows you how to create a report using Formula Preservation options.

➤ To preserve formulas when retrieving or retaining data:

1   Select **File**, and then **New** or click ▢.

2   Select **Essbase**, and then **Retrieve**.

3   In cell **A2**, drill down (double-click) on **Year.**

4   Press **Alt** and, in cell **E1**, drill down (double-click) on **Scenario**.

5   Select cell **G3** and enter this formula in the cell: `=B3/B$7*100`

The $ in front of the 7 anchors the formula to the Year member.

	A	B	C	D	E	F	G
1		Measures	Product	Market			
2		Actual	Budget	Variance	Variance %	Scenario	
3	Qtr1	24703	30580	-5877	-19.21844343	24703	=B3/B$7*100
4	Qtr2	27107	32870	-5763	-17.53270459	27107	
5	Qtr3	27912	33980	-6068	-17.85756327	27912	
6	Qtr4	25800	31950	-6150	-19.24882629	25800	
7	Year	105522	129380	-23858	-18.44025352	105522	

6   Press **Enter**.

The spreadsheet calculates the formula that you entered in cell G3 and now reflects Qtr1 as a percentage of Year.

	A	B	C	D	E	F	G
1		Measures	Product	Market			
2		Actual	Budget	Variance	Variance %	Scenario	
3	Qtr1	24703	30580	-5877	-19.21844343	24703	23.41028411
4	Qtr2	27107	32870	-5763	-17.53270459	27107	
5	Qtr3	27912	33980	-6068	-17.85756327	27912	
6	Qtr4	25800	31950	-6150	-19.24882629	25800	
7	Year	105522	129380	-23858	-18.44025352	105522	

7   Select **Essbase**, and then **Options**.

8   In **Mode**, under **Formula Preservation**, select **Retain on Retrieval** and **Retain on Keep and Remove Only**, and then click **OK**.

9   In cells **D2**, **E2**, and **F2**, respectively, select **Variance**, **%Variance**, and **Scenario**.

10 Select **Essbase**, and then **Remove Only**.

Essbase removes the selected columns but retains the formula that you entered, keeping it with the retained dataset.

	A	B	C	D	E
1		Measures	Product	Market	
2		Actual	Budget		
3	Qtr1	24703	30580	23.41028411	
4	Qtr2	27107	32870		
5	Qtr3	27912	33980		
6	Qtr4	25800	31950		
7	Year	105522	129380		
8					
9					
10					

11 Select **Essbase**, and then **Options**.

12 In **Mode**, under **Formula Preservation**, select **Retain on Zooms**, and then click **OK**.

13 In cell **A3**, drill down (double-click) on **Qtr1**.

Essbase drills down on Qtr1 and moves the formula down with the Qtr1 member.

	A	B	C	D	E
1		Measures	Product	Market	
2		Actual	Budget		
3	Jan	8024	9940		
4	Feb	8346	10350		
5	Mar	8333	10290		
6	Qtr1	24703	30580	23.41028411	
7	Qtr2	27107	32870		
8	Qtr3	27912	33980		
9	Qtr4	25800	31950		
10	Year	105522	129380		
11					

14 Select **Essbase**, and then **FlashBack**.

15 Select **Essbase**, and then **Options**.

16 In **Mode**, under **Formula Preservation**, select the **Formula Fill** , and then click **OK**.

17 In cell **A3**, drill down (double-click) on **Qtr1**.

Essbase drills down on Qtr1 and replicates the formula for each member of Qtr1 (Jan, Feb, and Mar). To view the replicated formulas, click in cells D3, D4, D5, and D6 and examine the syntax in the spreadsheet formula bar.

	A	B	C	D	E
1		Measures	Product	Market	
2		Actual	Budget		
3	Jan	8024	9940	29.60121002	
4	Feb	8346	10350	29.9011178	
5	Mar	8333	10290	32.29844961	
6	Qtr1	24703	30580	23.41028411	
7	Qtr2	27107	32870		
8	Qtr3	27912	33980		
9	Qtr4	25800	31950		
10	Year	105522	129380		
11					

18 Before moving on with the tutorial, complete each of these tasks:

a.   Select **Essbase**, and then **Options**.

b.   In **Mode**, clear all **Formula Preservation** options.

c.   Select **File**, and then **Close**.

  Do not save the worksheet.

User Reference

Lesson: Retrieving a Range of Data

You can select a range of cells and tell Essbase to restrict the data retrieval to the selected range in the worksheet.

As part of the default Essbase installation, the `Profit.xls` sample file illustrates how to retrieve a range of data.

➤ To retrieve a rage of data using `Profit.xls`:

1 Select **File**, and then **Open**.

2 From *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open**
`Profit.xls`.

  Note: Depending on how software is installed on your computer, the file may not be available or may be in another directory. Contact the Essbase system administrator for the location of the file.

When you open `Profit.xls`, the range of cells from B2 through F9 is selected for you.

	A	B	C	D	E	F	G	H
1								
2			100	Central				
3			Actual		Budget			
4			Sales	Profit %	Sales	Profit %		
5		Qtr1	1111	27.3	2222	34.5		
6		Qtr2	1111	28.4	2222	35.1		
7		Qtr3	1111	28.8	2222	35.3		
8		Qtr4	1111	27.6	2222	38.1		
9		Year	1111	28.1	2222	35.7		
10								
11								
12				Central	Actual	Profit %		
13			Qtr1	Qtr2	Qtr3	Qtr4	Year	
14		100-10	22.0	22.0	22.0	22.0	22.0	
15		100-20	22.0	22.0	22.0	22.0	22.0	
16		100-30	22.0	22.0	22.0	22.0	22.0	

3 Select **Essbase**, and then **Retrieve**.

Essbase updates only the data in the selected range of cells.

	A	B	C	D	E	F	G	H
1								
2			100	Central				
3			Actual		Budget			
4			Sales	Profit %	Sales	Profit %		
5		Qtr1	8074	27.3	8200	34.5		
6		Qtr2	8701	28.4	8870	35.1		
7		Qtr3	8894	28.8	9060	35.3		
8		Qtr4	8139	27.6	7800	38.1		
9		Year	33808	28.1	33930	35.7		
10								
11								
12				Central	Actual	Profit %		
13			Qtr1	Qtr2	Qtr3	Qtr4	Year	
14		100-10	22.0	22.0	22.0	22.0	22.0	
15		100-20	22.0	22.0	22.0	22.0	22.0	
16		100-30	22.0	22.0	22.0	22.0	22.0	

4 Select cells B12 through G16.

	A	B	C	D	E	F	G	H
1								
2			100	Central				
3			Actual		Budget			
4			Sales	Profit %	Sales	Profit %		
5		Qtr1	8074	27.3	8200	34.5		
6		Qtr2	8701	28.4	8870	35.1		
7		Qtr3	8894	28.8	9060	35.3		
8		Qtr4	8139	27.6	7800	38.1		
9		Year	33808	28.1	33930	35.7		
10								
11								
12				Central	Actual	Profit %		
13			Qtr1	Qtr2	Qtr3	Qtr4	Year	
14		100-10	22.0	22.0	22.0	22.0	22.0	
15		100-20	22.0	22.0	22.0	22.0	22.0	
16		100-30	22.0	22.0	22.0	22.0	22.0	

5   Select **Essbase**, and then **Retrieve**.

Essbase updates the data in the selected range.

	A	B	C	D	E	F	G	H
1								
2			100	Central				
3			Actual		Budget			
4			Sales	Profit %	Sales	Profit %		
5		Qtr1	8074	27.3	8200	34.5		
6		Qtr2	8701	28.4	8870	35.1		
7		Qtr3	8894	28.8	9060	35.3		
8		Qtr4	8139	27.6	7800	38.1		
9		Year	33808	28.1	33930	35.7		
10								
11								
12				Central	Actual	Profit %		
13			Qtr1	Qtr2	Qtr3	Qtr4	Year	
14		100-10	24.6	25.1	24.7	23.8	24.6	
15		100-20	29.6	31.3	32.1	29.7	30.7	
16		100-30	28.9	30.0	31.0	31.4	30.4	

6   Close the file without saving it.

Lesson: Retrieving Data Using Functions

You can use the Essbase cell retrieve function, EssCell, to retrieve data when you perform an Essbase retrieval or when you recalculate a worksheet through Excel. As part of the default Essbase installation, the Summary.xls sample file is provided with EssCell functions set in cells B16 and B17.

➤ To retrieve data in `Summary.xls` using EssCell:

1 Select **File**, and then **Open.**

2 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, open `Summary.xls`.

> **Note:** Depending on how software is installed on your computer, the file may not be available or may be in another directory. Contact the Essbase system administrator for the location of this file.

The values in cells B16 and B17 are currently #N/A.

	A	B	C	D	E	F	G
1	200						
2	Texas						
3							
4		Budget					
5		Qtr1	Qtr2	Qtr3	Qtr4	Year	
6	Sales	1460	1560	1630	1320	5970	
7	COGS	560	590	630	500	2280	
8	Margin	900	970	1000	820	3690	
9	Marketing	160	160	170	120	610	
10	Payroll	60	60	60	110	290	
11	Misc	#Missing	#Missing	#Missing	#Missing	#Missing	
12	Total Expenses	220	220	230	230	900	
13	Profit	680	750	770	590	2790	
14							
15							
16	Year Sales	#N/A					
17	Year Margin %	#N/A					

3 Select cell B16 to view the EssCell function in the formula bar at the top of the worksheet:

```
=EssCell("Sales", A1, A2, B4, F5)
```

4 Select **Essbase**, and then **Retrieve.**

Essbase calculates the EssCell functions in cells B16 and B17.

	A	B	C	D	E	F
1	200					
2	Texas					
3						
4		Budget				
5		Qtr1	Qtr2	Qtr3	Qtr4	Year
6	Sales	1460	1560	1630	1320	5970
7	COGS	560	590	630	500	2280
8	Margin	900	970	1000	820	3690
9	Marketing	160	160	170	120	610
10	Payroll	60	60	60	110	290
11	Misc	#Missing	#Missing	#Missing	#Missing	#Missing
12	Total Expenses	220	220	230	230	900
13	Profit	680	750	770	590	2790
14						
15						
16	Year Sales	5970				
17	Year Margin %	61.81				

Now update the EssCell functions to retrieve data for another state.

5   Change the contents of cell **A2** from **Texas** to **Florida**.

The values in cells B16 and B17 are updated as soon as you update the cell. The update occurs because you configured Excel to calculate changes automatically. The remaining data cells do not change.

	A	B	C	D	E	F
1	200					
2	Florida					
3						
4		Budget				
5		Qtr1	Qtr2	Qtr3	Qtr4	Year
6	Sales	1460	1560	1630	1320	5970
7	COGS	560	590	630	500	2280
8	Margin	900	970	1000	820	3690
9	Marketing	160	160	170	120	610
10	Payroll	60	60	60	110	290
11	Misc	#Missing	#Missing	#Missing	#Missing	#Missing
12	Total Expenses	220	220	230	230	900
13	Profit	680	750	770	590	2790
14						
15						
16	Year Sales	5030				
17	Year Margin %	60.04				

6   Select **Essbase**, and then **Retrieve**.

7   Close the file without saving it.

User Reference

"Retrieving Data Using Functions" on page 49

Lesson: Retrieving Dynamic Calc Members

As part of the defaultEssbase installation, the `Asymm.xls` sample file is provided to illustrate how to use Dynamic Calc members.

➤ To apply styles to Dynamic Calc members in `Asymm.xls`:

1   Select **File**, and then **Open**.

2   From *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open** `Asymm.xls`.

3   To drill up on **Actual**, in cell **C3**, double-click the right-mouse button.

4   In cell **C3**, drill down on **Scenario** to display all members of Scenario.

Essbase displays only the Scenario members for Qtr1.

	A	B	C	D	E	F	G
1					Sales		
2							
3			Actual	Budget	Variance	Variance %	Scenario
4			Qtr1	Qtr1	Qtr1	Qtr1	Qtr1
5	East	Colas	6292	5870	422	7.189097104	6292
6		Root Beer	5726	5460	266	4.871794872	5726
7		Fruit Soda	3735	3880	-145	-3.737113402	3735
8							
9	West	Root Beer	8278	7700	578	7.506493506	8278
10		Cream Soda	8043	6890	1153	16.73439768	8043

5   Select **Essbase**, and then **Options**.

6   Select **Style**.

You must be connected to the Sample Basic database to display the Style page. See "Connecting to a Database" on page 306.

7   In **Members**, scroll down until you see **Dynamic Calculations**.

8   Select **Dynamic Calculations**, and then click **Format** .

9   In **Font**, select **Bold Italic**.

10 In **Color**, select **Gray**.

11 Click **OK**, and then select **Display**.

12 In **Cells**, click **Use Styles**, and then click **OK**.

13 Select **Essbase**, and then **Retrieve**.

Essbase displays the data and applies all styles that you set, including the styles set for Dynamic Calc members and the styles you set in Appendix A. You know that the columns for Variance and Variance% are dynamically calculated because Essbase displays these members in gray, bold, italicized font. (Variance and Variance% display a red background because that style was previously set for all members of the Scenario dimension.)

		A	B	C	D	E	F	G
1						Sales		
2								
3					Actual	Budget	*Variance*	*Variance %*	Scenario
4					Qtr1	Qtr1	Qtr1	Qtr1	Qtr1
5		East	Colas	6292	5870	422	7.189097104	6292
6			Root Beer	5726	5460	266	4.871794872	5726
7			Fruit Soda	3735	3880	-145	-3.737113402	3735
8								
9		West	Root Beer	8278	7700	578	7.506493506	8278
10			Cream Soda	8043	6890	1153	16.73439768	8043

14 Close the `Asymm.xls` file without saving it.

User Reference

"Precedence of Overlapping Styles" on page 71

"Retrieving Dynamic Calc Members" on page 43

Lesson: Using Dynamic Time Series

To leverage Dynamic Time Series in Spreadsheet Add-in, choose the latest time period for which you want data in a to-date calculation. The calculated value of the Dynamic Time Series member is derived when you define the latest time period to be reported.

In the Sample Basic database, for example, the level 0 members of the Year dimension are the months of the year: Jan, Feb, Mar, and so on. If the current month is August and you want to know the sales data for the quarter up to the current month, a quarter-to-date calculation gives you the sales data for the months of July and August.

➤ To illustrate the concept of Dynamic Time Series:

1 Select **File**, and then **New** or click 🗋.

2 Select **Essbase**, and then **Options**.

3 In **Zoom**, under **Zoom In**, select **Next Level**.

4 Clear **Within Selected Group**, and then click **OK**.

5 Select **Essbase**, and then **Retrieve**.

6 In cell **B1**, drill down on (double-click) Measures.

7 In cell **B2**, click **Year**.

8 Enter `Q-T-D` in cell **B2** and press **Enter**.

	A	B	C	D	E
1			**Product**	**Market**	**Scenario**
2	**Profit**	**Q-T-D**	105522		
3	**Inventory**	**Year**	117405		
4	**Ratios**	**Year**	55.26162827		
5	**Measures**	**Year**	105522		
6					
7					

9 Select **Essbase**, and then **Options**.

10 In **Display**, under **Dynamic Time Series**, select **Latest Time Period**, and select **May**.

> **Note:** If you do not specify a latest time period,Essbase uses the first level 0 member (Jan) as the default.

11 Click **OK**.

12 Select **Essbase**, and then **Retrieve**.

> **Note:** The Retrieve & Lock, Zoom In, and Zoom Out commands are not supported with Dynamic Time Series members.

Essbase displays data for the Q-T-D member. The data values in the worksheet are the aggregated values for April and May, because May is the month that you specified as the latest month in the quarter-to-date Dynamic Time Series.

	A	B	C	D	E
1			**Product**	**Market**	**Scenario**
2	**Profit**	*Q-T-D*	17573		
3	**Inventory**	**Year**	117405		
4	**Ratios**	**Year**	55.26162827		
5	**Measures**	**Year**	105522		

13 To close the worksheet, select **File**, and then **Close**.

Do not save the worksheet.

User Reference

"Specifying Latest Time Period for Dynamic Time Series" on page 46

Using Free-Form Reporting to Retrieve Data

So far, you retrieved Essbase data into a worksheet through ad hoc retrieval, Query Designer queries, and Member Selection operations. The following lessons show you how to use free-form reporting, which is useful when you are familiar with the dimensions and members in the database outline.

● "Lesson: Constructing a Free-form Report in Advanced Interpretation Mode" on page 328

User Reference

Lesson: Constructing a Free-form Report in Advanced Interpretation Mode

When you construct a report by entering member names directly into a worksheet in Advanced Interpretation retrieval mode, Essbase interprets the member names and creates a default view that is based on the location of the labels.

➤ To construct a free-form report in Advanced Interpretation retrieval mode:

1   Select **File**, and then **New** or click [ ].

2   Select **Essbase**, and then **Options**.

3   In **Mode**, under **Retrieval**, select **Advanced Interpretation** (the default setting), and then click **OK**.

4   Enter member names and data as shown:

	A	B	C	D	E	F
1	Sales	East	Budget			
2						
3		Qtr1	Qtr2			
4	100					
5	200					
6	300					
7	400					

> **Note:** If a member name consists of a number, such as 100, you must precede the member name with a single quotation mark (for example, '100). This rule also applies to member names with spaces between words.

5   Select **Essbase**, and then **Retrieve** or double-click a data cell.

Essbase retrieves data for the members that you entered into the free-form report and implements the Use Aliases option that you set in "Setting Essbase Options" on page 306.

	A	B	C	D	E	F
1	Sales	East	Budget			
2						
3		Qtr1	Qtr2			
4	Colas	5870	6760			
5	Root Beer	5460	5650			
6	Cream Soda	3680	4030			
7	Fruit Soda	3880	4150			

For example:

6 Select **Essbase**, and then **FlashBack**.

7 Delete cells **A1**, **B1**, and **C1**.

8 In cell **B4**, enter 0 .

Because the free-form report does not contain all dimensions in the database, you must enter a dummy data value (zero in this example), into the first data cell to indicate to Essbase where the data starts in the worksheet. Use a numeric value as the dummy value.

	A	B	C	D	E	F
1						
2						
3		Qtr1	Qtr2			
4	100	0				
5	200					
6	300					
7	400					

9 Select **Essbase**, and then **Retrieve**.

Essbase adds the dimensions that were omitted from the free-form report to the worksheet and retrieves data.

	A	B	C	D	E	F
1						
2						
3		Measures	Market	Scenario		
4		Qtr1	Qtr2			
5	Colas	7048	7872			
6	Root Beer	6721	7030			
7	Cream Soda	5929	6769			
8	Fruit Soda	5005	5436			

10 Select **File**, and then **Close**.

Do not save the worksheet.

User Reference

"Advanced Interpretation Mode Retrievals" on page 36

Lesson: Using Free-Form Mode

Free-Form mode enables you to enter member names in a worksheet location and interprets the contents of the worksheet when fulfilling the retrieval request. You can use Essbase report script commands to retrieve data into a worksheet. Report script commands are most useful for defining member references that can bring back the most current member information dynamically.

➤ To construct a free-form report in Free-Form retrieval mode:

1 Select **File**, and then **New** or click ☐.

2 Select **Essbase**, and then **Options**.

3 In **Mode**, under **Retrieval**, select **Free Form**.

4 Select **Display**.

5 In **Cells**, select **Auto Sort Rows**, and then click **OK**.

6 Enter the member names into the worksheet as shown:

	A	B	C	D	E	F
1	Product	COGS				
2	Jan					
3	East					
4	Budget					
5	Actual					
6						
7						

7 Select **Essbase**, and then **Retrieve**.

Essbase retrieves data for the members and creates a default view according to the location of the labels. Three members were pivoted from row groups to column groups.

	A	B	C	D	E	F
1		Product	COGS	Jan	East	
2	Budget	2590				
3	Actual	3007				
4						
5						

8 Select **File**, and then **Close**.

Do not save the worksheet.

➤ To create a report by entering member names and a report script command:

1 Select **File**, and then **New** or click ☐.

2 Enter the member names into the blank worksheet:

	A	B	C	D	E
1		Actual	Sales	East	
2		Jan	Feb	Mar	
3					

3 In cell **A3**, enter `<IDESCENDANTS Product` and press **Enter**.

	A	B	C	D
1		Actual	Sales	East
2		Jan	Feb	Mar
3	<DESCENDANTS Product			
4				

4 Select **Essbase**, and then **Retrieve**.

Essbase retrieves data into the worksheet for all descendants of Product and for the members that you entered in the worksheet.

	A	B	C	D	E
1		Actual	Sales	East	
2		Jan	Feb	Mar	
3	Cola	1812	1754	1805	
4	Diet Cola	200	206	214	
5	Caffeine Free Cola	93	101	107	
6	Colas	2105	2061	2126	
7	Old Fashioned	647	668	672	
8	Diet Root Beer	310	310	312	
9	Sasparilla	#Missing	#Missing	#Missing	
10	Birch Beer	896	988	923	
11	Root Beer	1853	1966	1907	
12	Dark Cream	999	1012	1026	

Note: When Essbase completes the retrieval, the Report Script command is overwritten by the data it returns. You can use FlashBack to restore the previous view in Free-Form mode.

5   Select **File**, and then **Close**.

Do not save the worksheet.

User Reference

Lesson: Using Attributes in Free-Form Reporting

Essbase enables you to retrieve data selectively by specifying attributes that are associated with a base dimension. For example, in the Sample Basic database, the Product base dimension is associated with attributes such as packaging and size. You can enter an attribute name into the worksheet to retrieve data that is associated with that attribute.

➤   To use attributes in a free-form report:

1   Select **File**, and then **New** or click 🗋.

2   Enter member names as shown:

	A	B	C	D	E
1	Caffeinated	Bottle	Profit	Qtr1	East
2					

Caffeinated is an attribute dimension associated with the Product base dimension. Bottle is a level 0 member of the Pkg_Type attribute dimension. The Pkg_Type dimension is associated with the Product base dimension. A level 0 member is the lowest level member in a dimension.

3   Click an empty cell and select **Essbase**, and then **Retrieve** or double-click an empty data cell.

Essbase retrieves information on profits for the first quarter of the year for all members of the Product base dimension that are associated with the level 0 attribute members of the Caffeinated attribute dimension (Caffeinated_True and Caffeinated_False) and the level 0 member Bottle of the Pkg_Type attribute dimension.

	A	B	C	D	E	F
1		Caffeinated	Bottle	Profit	Qtr1	East
2	Scenario	2604				
3						

4   You can drill down to data on the level 0 attribute members of the Caffeinated attribute dimension.

	A	B	C	D	E	F
1			Bottle	Profit	Qtr1	East
2	Caffeinated_True	Scenario	142			
3	Caffeinated_False	Scenario	2462			
4						

5   To drill down further for data on profits for the first quarter for all members of the East base dimension, double-click cell **E1**.

	A	B	C	D	E	F
1				Bottle	Profit	Scenario
2	New York	Caffeinated_True	Year	-2050		
3		Caffeinated_False	Year	6754		
4		Caffeinated	Year	4704		
5	Massachusetts	Caffeinated_True	Year	30		
6		Caffeinated_False	Year	1577		
7		Caffeinated	Year	1607		
8	Florida	Caffeinated_True	Year	1727		
9		Caffeinated_False	Year	934		
10		Caffeinated	Year	2661		
11	Connecticut	Caffeinated_True	Year	1134		
12		Caffeinated_False	Year	742		
13		Caffeinated	Year	1876		
14	New Hampshire	Caffeinated_True	Year	-84		
15		Caffeinated_False	Year	842		
16		Caffeinated	Year	758		
17	East	Caffeinated_True	Year	757		
18		Caffeinated_False	Year	10849		
19		Caffeinated	Year	11606		

Lesson: Entering Generation and Level Names

You can enter generation or level names directly into a worksheet to retrieve members. The Essbase application designer defines generation and level names for database dimensions in the database outline. Two options enable you to determine which generation and level names are defined in the database:

●   View generation and level names in the Essbase Member Selection dialog box or through Query Designer.

- Contact the Essbase application designer to see which generation and level names are defined in the database outline.

➤ To enter generation and level names directly into a free-form report:

1 Select **File**, and then **New** or click 🗋.

2 Select **Essbase**, and then **Options**.

3 In **Mode**, under **Retrieval**, select **Advanced Interpretation**, and then click **OK**.

4 Enter member names as shown:

	A	B	C	D	E	F
1		Sales	Budget	West	Year	
2						
3						

5 Enter a generation name as shown:

	A	B	C	D	E	F
1		Sales	Budget	West	Year	
2	Family					
3						
4						

Family is a generation name in the Product dimension. The name is defined in the Sample Basic database.

6 Select **Essbase**, and then **Retrieve**.

Essbase retrieves data for the member and generation names that you entered. The Family generation name expands to its individual members.

	A	B	C	D	E	F
1		Sales	Budget	West	Year	
2	Colas	34830				
3	Root Beer	31810				
4	Cream Soda	30480				
5	Fruit Soda	22730				
6	Diet Drinks	35690				
7						

7 Change **Year** to a level name (**Lev0,Year**).

	A	B	C	D	E	F
1		Sales	Budget	West	Lev0,Year	
2	Colas	34830				
3	Root Beer	31810				
4	Cream Soda	30480				
5	Fruit Soda	22730				
6	Diet Drinks	35690				
7						

Note: Do not insert a space between the comma after 0 and the word Year. Generation and level names that are entered directly into a worksheet must be precise.

8 Select **Essbase**, and then **Retrieve**.

Essbase retrieves data for the level 0 members of the Year dimension, which are the individual months (Jan, Feb, Mar, and so forth).

	A	B	C	D	E	F
1			Sales	Budget	West	
2	Jan	Colas	2860			
3		Root Beer	2540			
4		Cream Soda	2220			
5		Fruit Soda	1840			
6		Diet Drinks	2810			
7	Feb	Colas	2820			
8		Root Beer	2560			
9		Cream Soda	2310			
10		Fruit Soda	1840			
11		Diet Drinks	2900			
12	Mar	Colas	2820			

9 Select **File**, and then **Close**.

Do not save the worksheet.

Lesson: Retrieving Data Using Visual Explorer

Visual Explorer provides Essbase users with powerful analytics in a highly graphical format. It enables users to unlock the information stored in multidimensional databases using a free-form canvas for exploring and analyzing data.

Visual Explorer is launched directly from the Essbase menu in Spreadsheet Add-in, using the Visualize & Explore command. Using the technique of dragging interface elements, Essbase users can quickly summarize and visualize data from an Essbase database. Visual Explorer offers users the option to pass data back to the Excel worksheet from which it was launched, or to insert the data into another Excel worksheet where additional analysis can be performed.

Note: For detailed information on using Visual Explorer, see the online help that is accessed from the Help menu in Visual Explorer.

This example uses Visual Explorer to identify quickly the most profitable product sales by quarter in the Sample Basic database.

➤ To use Visual Explorer to identify the most profitable product sales by quarter:

1 Open a worksheet.

2 Log in to the Sample Basic database.

3 Select **Essbase**, and then **Visualize & Explore**.

The Visual Explorer interface is displayed.

4 Under **Marks**, select **Bar**.

5   Drag Year from the **Dimension** section of the **Data** window and drop it on the **Column** shelf.

6   Drag Sales from the **Measures** section of the **Data** window and drop it on the **Column** shelf, placing it to the right of Quarter.

7   Drag Profit % from the **Measures** section of the **Data** window and drop it on the **Color** shelf.

At this point, you can see which quarter is the most profitable based on sales as indicated by the darkest color bar.

8   Drag Region from the **Dimension** section of the **Data** window and drop it on the **Row** shelf.

9   Drag Category from the **Dimension** section of the **Data** window and drop it on the **Row** shelf, placing it to the right of Region.

When you drag a generation to a shelf, all generations that are ancestors of the selected generation are automatically included in this placement. If you press the Control (Ctrl) key while dragging a generation to a shelf, only that generation is included in the placement.

10 To ignore the Diet Drinks alternate rollup in this analysis, right-click Category in the **Row** shelf and select **Filter**.

Diet Drinks is an alternate rollup containing shared members. You can deselect it from the query so that members that are shown are not redisplayed.

11 In **Filter**, clear the Diet Drinks member, and then click **OK**.

12 Expand Category on the **Row** shelf.

13 Review the visual worksheet.

As shown by the dark green bars, Colas in the East is the most consistently profitable product based on sales.
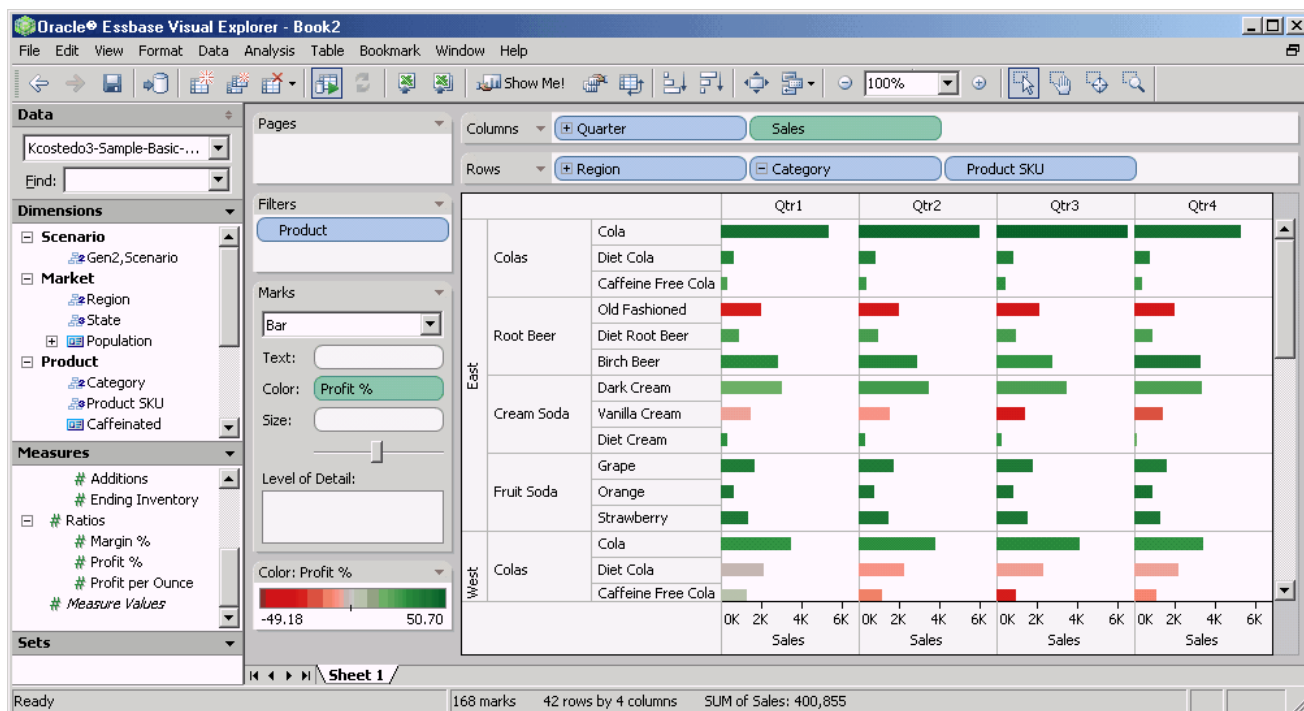
You are now ready to pass the data from the visual worksheet into an Excel worksheet in Spreadsheet Add-in.

14 In Visual Explorer, select **File**, then **Export**, and then **Cross-tab to Excel**.

> **Note:** Alternatively, you can select File, and then Update Excel (New Worksheet).

User Reference

Using Linked Reporting Objects

A *linked reporting object* is an external file, cell note, or URL that you link to a cell in an Essbase database, and which can be retrieved by Spreadsheet Add-in users with access to the database.

These topics show you how to use LROs:

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User Reference

Lesson: Linking a File to a Data Cell

Using the linked reporting objects feature, you can link an external file to a data cell in Spreadsheet Add-in. Essbase stores the file on the Essbase Server. Users who can access the database can retrieve the file and view the data contained in the cell.

This example uses the `Asymm.xls` sample worksheet with data from the Sample Basic database. It links a sample file, `Budasmp.txt`, to a cell containing the Budget figure. `Budasmp.txt` details the budgetary assumptions for the current year.

➤ To link a file to a data cell:

1 Select **File**, and then **Open**.

2 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** Asymm.xls.

3 Ensure that you are connected to the Sample Basic database.

If you are not connected, see .

4 Select cell **D5**.

	A	B	C	D	E	F	G
1	Sales						
2							
3			*Actual*	*Budget*	*Budget*	*Budget*	
4			**Qtr1**	**Qtr2**	**Qtr3**	**Qtr4**	
5	East	Colas	6292	6760	7300	5570	
6		Root Beer	5726	5650	5600	5780	
7		Fruit Soda	3735	4150	4350	3850	
8							
9	West	Root Beer	8278	7970	8320	7820	
10		Cream Soda	8043	7720	8300	7570	
11							

Note: You can link objects only to data cells, not to cells containing member names.

5 Select **Essbase**, and then **Linked Objects**.

The Linked Objects Browser dialog box is displayed.

6 In **Linked Objects Browser**, click **Attach**.

The Attach Linked Object dialog box is displayed.

7 Under **Attachment Type**.

8 Click **Browse** next to **File Name**.

The Browse Files dialog box is displayed.

9 From the *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, select Budasmp.txt.

10 Click **Open**.

11 **Optional:** Under **File Description**, enter this brief description for the file: .

Budgetary assumption report

12 Click **OK**.

Essbase copies the file to the server and establishes a link to the current data cell.

13 Click **Close**.

Leave the file (Asymm.xls) open for the next tutorial task.

User Reference

Lesson: Applying Visual Cues to LROs

To recognize cells with linked reporting objects attached to them, you can apply a visual cue, or style, to the cells.

➤ To apply styles:

1   Select **Essbase**, and then **Options**.

2   In **Style**, under **Data Cells**, select **Linked Objects**.

3   Click **Format**.

4   From **Font style**, select **Italic**.

5   From **Color**, select **Purple**, and then click **OK**.

6   Select **Display**.

7   In **Cells**, select **Use Styles**, and then click **OK**.

8   Select **Essbase**, and then **Retrieve**.

Cell D5 (the cell to which you just attached the linked file) is now displayed in purple, italic font. Essbase refreshes the worksheet with the other options set in the Essbase Options dialog box.

	A	B	C	D	E	F
1	Sales					
2						
3			Actual	Budget	Budget	Budget
4			Qtr1	Qtr2	Qtr3	Qtr4
5	East	Colas	6292	*6760*	7300	5570
6		Root Beer	5726	5650	5600	5780
7		Fruit Soda	3735	4150	4350	3850
8						
9	West	Root Beer	8278	7970	8320	7820
10		Cream Soda	8043	7720	8300	7570

Leave the file (`Asymm.xls`) open for the next tutorial task.

Lesson: Linking a Cell Note to a Data Cell

In Spreadsheet Add-in, you can link individual cell notes that contain information on data cells. Cell notes can consist of no more than 599 characters. To link information to a data cell that is longer than 599 characters, you must create and save an external file and link the file to the data cell.

➤ To link a cell note to a data cell:

1   In the `Asymm.xls` file, select cell C5.

Note: You can link objects only to data cells, not to cells containing member names.

2   Select **Essbase**, and then **Linked Objects**.

The Linked Objects Browser dialog box is displayed.

3   In **Linked Objects Browser**, click **Attach**.

The Attach Linked Object dialog box is displayed.

4 Under **Attachment Type**, select **Cell Note**.

5 In **Cell Note**, enter this note:

```
This number needs to be updated by the Easters Sales Manager.
```

6 Click **OK**.

Essbase copies the note to the server and establishes a link to the current data cell.

7 Click **Close**.

8 Select **Essbase**, and then **Retrieve**.

Now Essbase displays two data cells (C5 and D5) in purple, italic font to represent a cell containing a linked reporting object

	A	B	C	D	E	F	G
1	Sales						
2							
3			Actual	Budget	Budget	Budget	
4			Qtr1	Qtr2	Qtr3	Qtr4	
5	East	Colas	*6292*	*6780*	7300	5570	
6		Root Beer	5726	5650	5600	5780	
7		Fruit Soda	3735	4150	4350	3850	
8							
9	West	Root Beer	8278	7970	8320	7820	
10		Cream Soda	8043	7720	8300	7570	

Leave the `Asymm.xls` file open for the next tutorial task.

User Reference

Lesson: Linking a URL to a Data Cell

You can link a URL to a data cell so that users who access the database can link directly to the specified URL. When you access the cell from Spreadsheet Add-in, the default Web browser opens and displays the specified URL.

➤ Using a Web browser and Internet access, follow these steps to link a data cell to the Oracle Web site:

1 In the `Asymm.xls` file, select cell **E5**.

A	A	B	C	D	E	F	G
1	Sales						
2							
3			Actual	Budget	Budget	Budget	
4			Qtr1	Qtr2	Qtr3	Qtr4	
5	East	Colas	6292	6760	7300	5570	
6		Root Beer	5726	5650	5600	5780	
7		Fruit Soda	3735	4150	4350	3850	
8							
9	West	Root Beer	8278	7970	8320	7820	
10		Cream Soda	8043	7720	8300	7570	

Note: You can link objects only to data cells, not to cells containing member names.

2 Select **Essbase**, and then **Linked Objects**.

The Linked Objects Browser dialog box is displayed.

3 In **Linked Objects Browser**, click **Attach**.

The Attach Linked Object dialog box is displayed.

4 Under **Attachment Type**, select **URL**.

5 Enter this URL in **Location:**

```
http://www.oracle.com
```

The URL location is limited to 512 characters.

6 Enter this optional brief description in **URL Description**

```
Oracle home page
```

The URL description is limited to 80 characters.

7 Click **OK.**

Essbase copies the URL string to the server and establishes a link to the current data cell.

Note: The syntax for the URL is not checked when it is created; Essbase checks the syntax when the user accesses the URL from the worksheet. The default Web browser checks for the existence, or validity, of the URL.

8 Click **Close.**

9 Select **Essbase**, and then **Retrieve.**

Leave the Asymm.xls file open for the next tutorial task.

User Reference

"Linking URLs to Data Cells" on page 144.

Accessing and Editing Linked Reporting Objects

For these tutorials, you access the LROs that you created in the previous lessons by using the Essbase menu item instead of the double-clicking action.

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Lesson: Accessing a Linked File

➤ To access the external file that you previously linked to a data cell:

1   In the `Asymm.xls` file, select cell **D5**.

2   Select **Essbase**, and then **Linked Objects**.

3   In **Linked Objects Browser**, select the `Budasmp.txt` file.

4   Click **View/Launch**.

The `Budasmp.txt` file is opened from the source application.
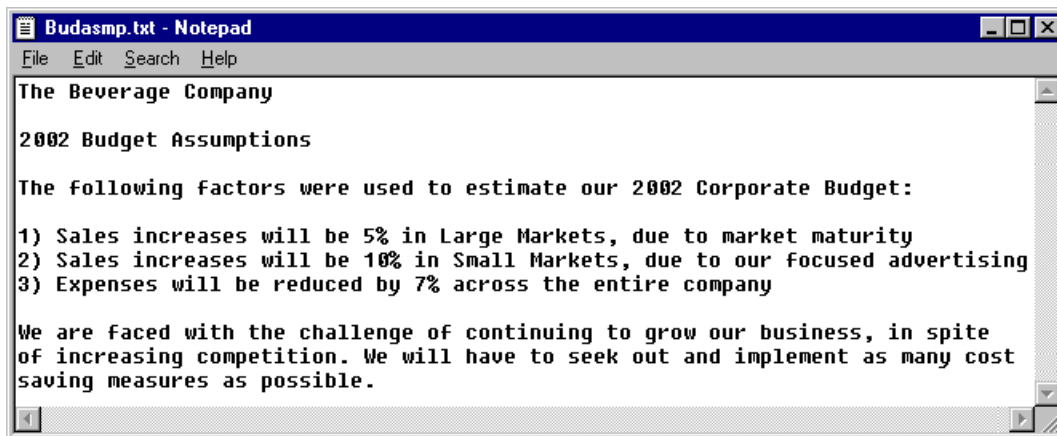
5   Close the `Budasmp.txt` file, and then click **Close**.

Leave the `Asymm.xls` file open for the next task.

User Reference

Lesson: Accessing a Linked Cell Note

➤ To access and edit a cell note:

1   In the `Asymm.xls` file, select cell **C5**.

2   Select **Essbase**, and then **Linked Objects**.

The Linked Objects Browser dialog box displays the cell note that is linked to the selected data cell.

3　In **Linked Objects Browser**, select the cell note.

4　Click **Edit**.

The Edit Cell Note dialog box is displayed with the selected cell note .

5　Edit the contents of the cell note:

`This number was updated on 6/4/09.`

6

7　Click **OK**.

Essbase saves the edits to the cell note on the server.

8　Click **Close**.

Leave the file (`Asymm.xls`) open for the next tutorial task.

User Reference

Lesson: Accessing and Editing a Linked URL

If you followed the steps in , you can access and edit the URL that you created.

➤　To access the URL:

1　In the `Asymm.xls` file, select cell **E5**.

2　Select **Essbase**, and then **Linked Objects**.

The Linked Objects Browser dialog box displays the URL that is linked to the selected data cell.

3　In **Linked Objects Browser**, select the URL.

4　Click **View/Launch**.

5　Close the Web browser.

➤　To edit the URL:

1　In **Linked Objects Browser**, select the URL.

2　Click **Edit**.

The Edit URL dialog box is displayed with the selected URL listed in the Location box.

3　Edit the URL location and description:

- Location—`http://www.oracle.com/technology/index.html`
- URL Description—`Oracle Technology Network home page`

4   Click **OK**.

Essbase saves the edits to the URL on the server.

5   Click **View/Launch**.

The Web browser launches and connects to the URL.

6   Close the Web browser.

7   Click **Close**.

8   Close the `Asymm.xls` file without saving it.

User Reference

Lesson: Updating Data on Essbase Server

After you retrieve data into a spreadsheet and modify values, you need to upload your changes to Essbase Server.

This lesson uses the `P&l.xls` file (installed with Spreadsheet Add-in) to illustrate how to update data on the server.

➤   To update data from `P&l.xls` to Essbase Server:

1   Select **File**, and then **Open**.

2   From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, open `P&l.xls`.

3   Select **Essbase**, and then **Retrieve & Lock**.

Essbase retrieves data and locks the database area to prevent other users from altering it and interfering with your changes.

	A	B	C	D	E	F	G	H
1	Market: Central					The Beverage Company		
2	Product: 200					Planning Dept.		
3	Scenario: Budget							
4								
5		Jan	Feb	Mar		Qtr1	% Sales	
6	Misc	#Missing	#Missing	#Missing		0	0.00	
7	Payroll	210	210	210		630	0.07	
8	Marketing	300	310	320		930	11.05	
9	Total Expenses	510	520	530		1560	18.53	
10								
11	COGS	1170	1180	1200		3550	42.16	
12	Sales	2740	2820	2860		8420	100.00	
13	Margin	1570	1640	1660		4870	57.84	
14	Profit	1060	1120	1130		3310	39.31	
15								
16	Ratio Analysis							
17	Markup	57.3%	58.2%	58.0%		57.8%		
18	Marketing %	10.9%	11.0%	11.2%		11.0%		

4   Change the value for Sales in Jan (cell **B12**) to `4000` and press **Enter**.

Essbase changes the affected data values.

5   Select **Essbase**, and then **Send**.

Essbase updates the server and unlocks the data blocks.

	A	B	C	D	E	F	G	H
1	Market: Central					The Beverage Company		
2	Product: 200					Planning Dept.		
3	Scenario: Budget							
4								
5		Jan	Feb	Mar		Qtr1	% Sales	
6	Misc	5	10	10		25	0.30	
7	Payroll	200	200	200		600	0.07	
8	Marketing	350	350	350		1050	12.47	
9	Total Expenses	555	560	560		1675	19.89	
10								
11	COGS	1170	1180	1200		3550	42.16	
12	Sales	2740	2820	2860		8420	100.00	
13	Margin	1570	1640	1660		4870	57.84	
14	Profit	1015	1080	1100		3195	37.95	
15								
16	Ratio Analysis							
17	Markup	57.3%	58.2%	58.0%		57.8%		
18	Marketing %	12.8%	12.4%	12.2%		12.5%		

6   Close `P&l.xls` without saving it.

User Reference

Lesson: Creating Multiple Worksheets from Data

One frequent requirement of budgeting and planning applications is to send worksheets to various functional areas of an organization. After the worksheets are distributed, the recipients can review, modify, and return content updates to the distributor.

Using the Essbase Cascade feature, you can create multiple worksheet files based on one database view. You can specify at what level of detail you want to replicate the worksheets to tailor the information to each recipient's needs.

The Sample Basic database contains data for beverage products sold in states across the U.S. For example, assume that all product managers review and respond to a proposed budget and return their changes to the finance department. You must create a worksheet for each combination of budget and P&L data to distribute to the product managers for their respective products.

➤   To create this set of worksheets:

1   Select **File**, and then **Open**.

2   From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** P&l.xls.

This file contains the data to replicate for each worksheet.

3   Select **Essbase**, and then **Retrieve**.

Notice that the retrieval uses the Use Aliases option, which is set for this file in the Essbase Options dialog box. In this example, product 200 changes to Root Beer, which is its preassigned alias.

4   Select Central (in cell **B1**) and Root Beer (in cell **B2**) as the members to be represented in the resulting worksheets.

5   Select **Essbase**, and then **Cascade**.

The Essbase Cascade Options dialog box is displayed.

6   Select **Cascade Information**.

The Cascade Information page contains the list of members that you selected and the options for specifying the level at which the selected members are retrieved into the cascaded worksheets.

7   In **Member**, select **Central**.

8   In **Choose Level for Selected Member**, select **Same Level**.

9   In **Member**, select **Root Beer**, and then select **Next Level** (the default setting) .

The replicated, or cascaded, spreadsheet reports now provide data for members at the *same* level as Central (East, West, and South) and for members at the level *below* Root Beer (Old Fashioned, Diet Root Beer, Sarsaparilla, and Birch Beer).

10 Select **Destination Options**, and then select only these options.

●   Destination Directory—C:/temp

●   Destination Types—**Separate Workbooks**

●   File Information—**Overwrite Existing Files**

    This overwrites cascaded worksheets with the same file name.

●   Naming Information—**Prefix**, enter BUD

11 Click **Format Options**, and select only these options:

●   Sheet to Sheet Replication—**Copy Formatting**

●   Sheet Formatting—**Suppress Missing Rows**

●   Table of Contents—**Include Table of Contents**

    This creates a Table of Contents text file that lists all replicated worksheets, their creation dates, and their member content. By default, Essbase names the Table of Contents file with the extension .lst.

12 Click **OK**.

Essbase creates the cascaded worksheets, and then automatically saves, closes, and logs them in the Table of Contents. Each individual file is saved in the directory that you specified, named Bud1.xls through Bud10.xls. When the Cascade is completed, Essbase returns you to the original worksheet view (that is, the source file).

13 Using a text editing application, open the Table of Contents file (BUD0.LST) from the destination directory that you specified earlier.

This file contains a list of all cascaded worksheets.

```
/*****************************************************/
/*  File name:      c:\temp\BUD0.lst */
/*  Creation date:  Mon Nov 10 11:48:34 2003 */
/*****************************************************/
c:\temp\BUD1.xls        /*  East, Old Fashioned  */
c:\temp\BUD2.xls        /*  East, Diet Root Beer  */
c:\temp\BUD3.xls        /*  East, Sasparilla  */
c:\temp\BUD4.xls        /*  East, Birch Beer  */
c:\temp\BUD5.xls        /*  West, Old Fashioned  */
c:\temp\BUD6.xls        /*  West, Diet Root Beer  */
c:\temp\BUD7.xls        /*  West, Sasparilla  */
c:\temp\BUD8.xls        /*  South, Old Fashioned  */
c:\temp\BUD9.xls        /*  South, Diet Root Beer  */
c:\temp\BUD10.xls       /*  South, Sasparilla  */
```

14 Select **File**, and then **Close**.

Do not save the worksheet.

Related Topics

Chapter 6, "Creating Multiple Worksheets from Data"

"Cascade Information Page (Essbase Cascade Options Dialog Box)" on page 380.

About Currency Conversion Applications

These topics provide a brief tutorial for working with currency conversions:

● "Lesson: Connecting to the Sample Currency Databases" on page 346

● "Lesson: Performing Ad Hoc Currency Reporting" on page 348

To complete these exercises, the Sample Interntl and Sample Xchgrate databases must be installed on the server. Contact the Essbase system administrator if these application and database pairs are unavailable.

User Reference

"Working with Currency Conversions" on page 88

Lesson: Connecting to the Sample Currency Databases

➤ To retrieve data from the Sample Interntl database:

1 Select **Essbase**, and then **Connect**.

2 Select the **Sample Interntl** database, and then click **OK**.

The Essbase installation also includes sample spreadsheet files that illustrate currency conversion concepts.

3 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** `Local.xls`.

The worksheet contains actual (Act) and budget (Bud) data entered in local currencies for New York and Germany.

	A	B	C	D	E
1		Jan	100-10		
2					
3		*Act*		*Bud*	
4		New York	Germany	New York	Germany
5	Sales	678	210	640	190
6	COGS	271	84	260	80
7	Margin	#Missing	#Missing	#Missing	#Missing
8					
9	Marketing	94	27	80	20
10	Payroll	51	31	40	20
11	Misc	0	0	#Missing	#Missing
12	Total Expenses	#Missing	#Missing	#Missing	#Missing
13					
14	Margin %	#Missing	#Missing	#Missing	#Missing
15	Profit %	#Missing	#Missing	#Missing	#Missing

4 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** `Convert.xls`.

5 Select **Essbase**, and then **Retrieve**.

The worksheet contains values for Actual and Budget as they are displayed after conversion.

	A	B	C	D	E	F	G
1				Jan	Cola		
2		Actual		Actual @ Bud XChg		Budget	
3		New York	Germany	New York	Germany	New York	Germany
4	Sales	678	130.2	678	210	640	133
5	COGS	271	52	271	84	260	56
6	Margin	407	78	407	126	380	77
7	Marketing	94	17	94	27	80	14
8	Payroll	51	19	51	31	40	14
9	Misc	0	0	0	0	0	0
10	Total Expenses	145	36	145	58	120	28
11	Margin %	60	60	60	60	59	58
12	Profit %	39	32	39	32	41	37

The worksheet contains data that is converted to U.S. dollars. Values for New York remain the same, but German values are converted. Essbase converts the values by using the exchange rates from the Sample Xchgrate database.

6 From *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample, **open** `Rates.xls`.

7 Connect to the **Sample Xchgrate** database.

8 Select **Essbase**, and then **Retrieve**.

	A	B	C	D	E	F	G	H	I	J
1				Jan	Feb	Mar	Apr	May	Jun	Jul
2	USD	Act xchg	P&L	1	1	1	1	1	1	1
3			B/S	1	1	1	1	1	1	1
4		Bud xchg	P&L	1	1	1	1	1	1	1
5			B/S	1	1	1	1	1	1	1
6	CAD	Act xchg	P&L	1.53	1.53	1.53	1.53	1.53	1.53	1.53
7			B/S	1.55	1.55	1.55	1.55	1.55	1.55	1.55
8		Bud xchg	P&L	1.5	1.5	1.5	1.5	1.5	1.5	1.5
9			B/S	1.5	1.5	1.5	1.5	1.5	1.5	1.5
10	EUR	Act xchg	P&L	1.01	1.01	1.01	1.01	1.01	1.01	1.01
11			B/S	1.03	1.03	1.03	1.03	1.03	1.03	1.03
12		Bud xchg	P&L	1.05	1.05	1.05	1.05	1.05	1.05	1.05
13			B/S	1.05	1.05	1.05	1.05	1.05	1.05	1.05

The worksheet contains all possible combinations of exchange rate scenarios, categories, and types by month. Because this example converts to U.S. dollars (USD), the sample file contains a base rate of 1 for USD. Therefore, the local and converted figures remain the same for New York. Essbase converts the figures for Germany, however, by using data values in the currency database, as follows:

- Essbase divides data values from Actual by values in the Act xchg currency type.

- Essbase divides data values from Actual @ Bud xchg by values in the Bud xchg currency type.

- Essbase divides data values from Budget by values in the Bud xchg currency type.

- Essbase bases all figures in `Convert.xls` on the CurCategory of P&L and the CurTime of Jan.

> **Note:** A conversion can be defined as a multiplication or division operation on exchange rates. The definition is determined by the application designer.

Lesson: Performing Ad Hoc Currency Reporting

A main database, such as Sample Interntl, usually contains values that are converted and stored in the database. You can perform currency conversions dynamically, as well. Essbase provides this capability with the Currency Report command. This command enables you to interactively change the currency rates and types applied to the retrieval.

➤ To perform an ad hoc conversion on data in `Convert.xls`:

1 From *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/client/sample`, **open** `Convert.xls`.

  The worksheet contains data that is converted to U.S. dollars.

2 Select **Essbase**, and then **Connect**.

3 Connect to the **Sample Interntl** database

4 Select **Essbase**, and then **Retrieve**.

5 Select **Essbase**, and then **Currency Report**.

The Essbase Currency Report dialog box enables you to modify the exchange rates applied to the retrieval interactively, with options for currency settings, names, categories, and years. .

Note: The dimension names CurName, CurType, and CurCategory are default names for a currency database. The application designer can use any names for these dimensions.

6   Select the currency settings to apply.

For example, select CAD from the CurName list and Bud xchg from the CurType list.

7   Click **Apply**.

8   Select **Essbase**, and then **Retrieve**.

Essbase converted the New York and Germany figures to Canadian dollars (CAD).

	A	B	C	D	E	F	G
1				Jan	Cola		
2		Actual		Actual @ Bud XChg		Budget	
3		New York	Germany	New York	Germany	New York	Germany
4	Sales	1017	186	1017	300	960	190
5	COGS	407	74	407	120	390	80
6	Margin	611	112	611	180	570	110
7	Marketing	141	24	141	39	120	20
8	Payroll	77	27	77	44	60	20
9	Misc	0	0	0	0	0	0
10	Total Expenses	218	51	218	83	180	40
11	Margin %	60	60	60	60	59	58
12	Profit %	39	32	39	32	41	37

9   Click **Clear** in **Essbase Currency Report**.

Performing a currency report retrieval does not change values in the database. The process performs a temporary conversion as part of the retrieval. Converted data values may not balance because the ad hoc conversion is performed on values that were previously calculated, or previously consolidated, in another currency.

If values must balance and be verified, they must be converted to the target currency in the database, calculated, and retrieved. This procedure differs from the ad hoc currency conversion retrievals described in this lesson.

On to Drill-Through Tasks

Now that you completed the advanced tutorial, you can move to the next tutorial, where you use the sample spreadsheet files to perform drill-through tasks in Spreadsheet Add-in.

C

Drill-Through Tutorial

About the Drill-Through Tutorial

Drill-through is a tool provided with Integration Services, a suite of tools and data integration services that serves as a bridge between relational data sources and Essbase Server. Integration Services works with Essbase and Spreadsheet Add-in.

Drill-through enables you to view and customize spreadsheet reports that display data retrieved from relational databases.

This tutorial guides you through tasks for using drill-through. It includes a description of the sample database, spreadsheet file, and drill-through report used in the tutorial.

Tutorial Prerequisites

Before starting the tutorial, you should be familiar with the Essbase product from using the Spreadsheet Add-in interface.

A sample Essbase database is the basis for the examples in this tutorial. The database administrator creates this sample Essbase database using the sample metaoutline supplied with Integration Services (see *Oracle Essbase Integration Services Online Help*). A sample spreadsheet file, `Essdt.xls`, contains a worksheet with the member intersections for the sample drill-through report. See .

If you plan to follow the examples in a live working session, check with the person at your organization who installs theIntegration Services product family for information on the sample database that you need for drill-through, and to which instance of Essbase Server you should connect.

Note: The `Essdt.xls` file also contains sample results of the drill-through reports when you run them without customizing the reports. The results are provided in separate sheets in the workbook so that you can see the sample report results without working through the tutorial. See "About the Samples Used in This Tutorial" on page 353.

Before starting the tutorial, ensure that you meet these requirements:

- You must install these components on your computer:
  - A 32-bit version of Excel
  - Spreadsheet Add-in
  - The Drill-through module

    The drill-through module is installed automatically when you install Spreadsheet Add-in. This module is transparent until you invoke it from the Linked Objects Browser. Contact the Essbase system administrator.

- The Essbase system administrator must install the Essbase Server.

- You must have access toIntegration Services and to an instance of Essbase Server. Contact the Essbase system administrator or the person who administers Integration Services at your organization.

- You must have access to the underlying relational database (typically using a user name and password that differ from those that you use for Essbase). To obtain access, contact the Essbase system administrator or the person who administers Integration Services at your organization.

- Ensure that the `Essdt.xls` sample drill-through report spreadsheet is available in *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample.

- To use the `Essdt.xls` sample drill-through report spreadsheet, log on to a computer with Essbase Server and Integration Services installed. You must perform a member and data load and calculate the data for the sample Essbase database that you access from Spreadsheet Add-in.

- The sample database containing the drill-through report must be running. The sample drill-through reports used in this tutorial (called "Market Detail," "Measures Detail," and "Product Detail") are available with the sample spreadsheet files. Contact the person at your organization who installs Integration Services to ascertain the name of the sample database to use for drill-through.

See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide*.

Setting Essbase Options

Before you begin the tutorial, ensure that the spreadsheet options are set to the initial settings described in the following procedure. If your option settings differ, the illustrations presented in this chapter may not match the spreadsheet view.

➤ To set Essbase options:

1 From the Excel menu, select **Essbase**, and then **Options**.

2 In **Essbase Options**, select **Display**, and then select only these options:

- Indentation—Totals
- Cells—Adjust Columns
- Replacement—#Missing Label: N/A
- Aliases
  - ❍ Use Aliases
  - ❍ Aliases—Default
- Query Designer—Use Sheet Options with Query Designer
- Dynamic Time Series—Latest Time Period: May

Clear all other Display options.

3 Select **Zoom**, and then select only these options:

- Zoom In—Next Level
- Member Retention—Include Selection
- Sampling Percentage—100

Clear all other Zoom options.

4 Select **Mode**, and select only the Advanced Interpretation options.

Clear all other Mode options.

5 Select **Style** and make sure that no options are selected.

6 Select **Global**, and then select only these options:

- Mouse Actions—Select all mouse action options
- Memory—Enable Flashback
- Display Messages
  - ❍ Warnings
  - ❍ Display Unknown Members
- Log Files—Select all log file options

7 Click **OK**.

About the Samples Used in This Tutorial

The sample database used for this tutorial contains these dimensions: Scenario, Product, Market, Measures, and Year.

	A	B	C	D	E	F	G	H	I	J	K
1		Profit	Product								
2			Scenario				Actual				Budget
3		Jan	Feb	Mar	Qtr1	Jan	Feb	Mar	Qtr1	Jan	Feb
4	New York	512	601	543	1,656	512	601	543	1,656	620	710
5	Massachusetts	519	498	515	1,532	519	498	515	1,532	570	550
6	Florida	336	361	373	1,070	336	361	373	1,070	400	450
7	Connecticut	321	309	290	920	321	309	290	920	380	390
8	New Hampshire	44	74	84	202	44	74	84	202	110	130
9	East	1,732	1,843	1,805	5,380	1,732	1,843	1,805	5,380	2,080	2,230
10	West	2,339	2,394	2,404	7,137	2,339	2,394	2,404	7,137	2,980	2,990
11	South	997	1,046	1,034	3,077	997	1,046	1,034	3,077	1,330	1,440
12	Central	2,956	3,063	3,090	9,109	2,956	3,063	3,090	9,109	3,550	3,690
13	Market	8,024	8,346	8,333	24,703	8,024	8,346	8,333	24,703	9,940	10,350
14											

Market drill \ **Market Detail** / Measures drill1 / Measures drill2 / M

For this spreadsheet view, detail-level data exists in a relational data source—data that is not available from Essbase. For example, the relational source contains columns of data for market detail, measures detail, and product detail. The steps in this tutorial walk you through a sample drill-through session, where you drill down into the detail data from the relational source.

This tutorial uses two sample drill-through reports, "Measures Detail" and "Market Detail." As with all drill-through reports, these reports are predefined to retrieve columns from the relational source. You use the Drill-Through Wizard to customize the report, "Measures Detail."

Note: The sample file also contains two more sample reports called "Product Detail" and "Two reports" that you can use for drill-through practice. In "Two reports," select the drill-through cell B3 to select from two drill-through reports, "Product Detail" and Market Detail, select cell B6 to view "Market Detail," and cell G3 to view "Product Detail."

The Essdt.xls file provides sample results of these drill-through reports:

- The Market Detail drill worksheet displays the results for Market Detail when you run a drill-through report on cell G4 without customizing the report.

- The Measures Detail drill1 worksheet displays the results for Measures Detail when you run a drill-through report on cell C4 without customizing the report.

- The Measures Detail drill2 worksheet displays the results for Measures Detail when you run a drill-through report on cell G6 without customizing the report.

- The Product Detail drill worksheet displays the results for Product Detail when you run a drill-through report on cell D5.

Accessing Drill-Through Reports from the Spreadsheet

Using Spreadsheet Add-in, you can access detail-level drill-through reports that are based on the member intersections of Essbase data cells in the sheet.

Each drill-through report is predefined by an administrator at your organization; that is, each drill-through report is set up to retrieve columns from the relational source and to sort and filter

data in these columns. Using the Drill-Through Wizard, you can customize these predefined drill-through reports to retrieve and display only the data that you want.

To access the predefined drill-through report, double-click a drill-through cell in the spreadsheet (or select a range of cells and select Essbase and then Linked Objects). You can set styles for cells tagged as "drill-through" to help identify which cells in the sheet are associated with drill-through reports.

When you double-click a drill-through cell, Essbase displays the Linked Objects Browser dialog box, which displays a drill-through report entry. One cell can be associated with multiple reports. The Linked Objects Browser dialog box also displays entries for linked partitions and other linked object types, such as cell notes, URLs, and application files.

After you view or customize the drill-through report, Integration Services retrieves data from the relational source and displays the results in a spreadsheet.

Before starting the tutorial, ensure that you meet these requirements:

- You must install these components on your computer:
  - ○ A 32-bit version of Excel
  - ○ Spreadsheet Add-in
  - ○ The Drill-through module

    The drill-through module is installed automatically when you install Spreadsheet Add-in. This module is transparent until you invoke it from the Linked Objects Browser. Contact the Essbase system administrator.

- The Essbase system administrator must install the Essbase Server.

- You must have access toIntegration Services and to an instance of Essbase Server. Contact the Essbase system administrator or the person who administers Integration Services at your organization.

- You must have access to the underlying relational database (typically using a user name and password that differ from those that you use for Essbase). To obtain access, contact the Essbase system administrator or the person who administers Integration Services at your organization.

- Ensure that the `Essdt.xls` sample drill-through report spreadsheet is available in *EPM_ORACLE_HOME*/products/Essbase/EssbaseClient/client/sample.

- To use the `Essdt.xls` sample drill-through report spreadsheet, log on to a computer with Essbase Server and Integration Services installed. You must perform a member and data load and calculate the data for the sample Essbase database that you access from Spreadsheet Add-in.

- The sample database containing the drill-through report must be running. The sample drill-through reports used in this tutorial (called "Market Detail," "Measures Detail," and "Product Detail") are available with the sample spreadsheet files. Contact the person at your organization who installs Integration Services to ascertain the name of the sample database to use for drill-through.

See the *Oracle Hyperion Enterprise Performance Management System Installation and Configuration Guide.*

➤ Before starting the drill-through tutorial, perform these tasks:

1 **Open the sample** `Essdt.xls` **file.**

The sample spreadsheet file contains the member intersections from the sample database for the drill-through report. This file is provided as part of the default Essbase installation.

2 **Set a style for data cells that are associated with drill-through reports.**

Tutorial Guidelines

● Each tutorial task builds upon the previous one, and tasks must be followed in succession.

● The examples used in this tutorial are based on the sample database that is included with the Integration Services installation. Contact the person at your organization who installs Integration Services for information about accessing the sample database.

● Set the options in the Essbase Options dialog box as described in "Setting Essbase Options" on page 352. If the option settings differ, the illustrations presented in this chapter may not match the spreadsheet view.

● If you err during the tutorial, select Essbase, and then FlashBack, to return to the previous spreadsheet view.

➤ To access the sample file and sample database:

1 **Start Excel.**

2 **Select File, and then Open.**

3 **Open** `Essdt.xls` **from** *EPM_ORACLE_HOME*`/products/Essbase/EssbaseClient/`
   `client/sample`

In this example, the Market Detail sheet is selected. The default sheet that is selected when you first open the file may differ.

	A	B	C	D	E	F	G	H	I	J	K
1		Profit	Product								
2			Scenario				Actual				Budget
3		Jan	Feb	Mar	Qtr1	Jan	Feb	Mar	Qtr1	Jan	Feb
4	New York	512	601	543	1,656	512	601	543	1,656	620	710
5	Massachusetts	519	498	515	1,532	519	498	515	1,532	570	550
6	Florida	336	361	373	1,070	336	361	373	1,070	400	450
7	Connecticut	321	309	290	920	321	309	290	920	380	390
8	New Hampshire	44	74	84	202	44	74	84	202	110	130
9	East	1,732	1,843	1,805	5,380	1,732	1,843	1,805	5,380	2,080	2,230
10	West	2,339	2,394	2,404	7,137	2,339	2,394	2,404	7,137	2,980	2,990
11	South	997	1,046	1,034	3,077	997	1,046	1,034	3,077	1,330	1,440
12	Central	2,956	3,063	3,090	9,109	2,956	3,063	3,090	9,109	3,550	3,690
13	Market	8,024	8,346	8,333	24,703	8,024	8,346	8,333	24,703	9,940	10,350
14											

Market drill \ **Market Detail** / Measures drill1 / Measures drill2 / M

The sample file shows data for members of an Essbase database. This sample file contains these three predefined drill-through reports, indicated by the tabs of the spreadsheet:

"Market Detail," "Measures Detail," and "Product Detail." Using drill-through, you can access these reports and customize them so that Integration Services retrieves only the data that you need and displays it in the desired format.

4 Select the **Market Detail** worksheet.

5 Select **Essbase**, then **Connect**, and then connect to the sample database.

> **Note:** A sample database for drill-through is not automatically provided with Integration Services or Essbase. Contact the person at your organization who installs Integration Services to set up a database for you.

6 Select **Essbase**, and then **Options**.

7 In **Style**, under **Data Cells**, select **Integration Server Drill-Through**, and then click **Format**.

The Font dialog box is displayed.

8 From **Font style**, select **Bold Italic**.

9 From **Color**, select **Blue**, and then click **OK**.

In the Essbase Options dialog box, an example of the selected style is displayed in the Sample box.

10 In **Essbase Options**, select **Display**, and select **Use Styles**.

11 Click **OK**.

12 Select **Essbase**, and then **Retrieve**.

The sample drill-through report is associated with the data cells for Actual, Profit, and Product at the month and Eastern state levels, so that these data cells are displayed in blue, bold, and italic font.

	A	B	C	D	E	F	G	H	I	J
1		Profit	Product							
2			Scenario				Actual			
3		Jan	Feb	Mar	Qtr1	Jan	Feb	Mar	Qtr1	Jan
4	New York	*512*	*601*	*543*	1,656	*512*	*601*	*543*	1,656	*620*
5	Massachusetts	*519*	*498*	*515*	1,532	*519*	*498*	*515*	1,532	*570*
6	Florida	*336*	*361*	*373*	1,070	*336*	*361*	*373*	1,070	*400*
7	Connecticut	*321*	*309*	*290*	920	*321*	*309*	*290*	920	*380*
8	New Hampshire	*44*	*74*	*84*	202	*44*	*74*	*84*	202	*110*
9	East	1,732	1,843	1,805	5,380	1,732	1,843	1,805	5,380	2,080
10	West	2,339	2,394	2,404	7,137	2,339	2,394	2,404	7,137	2,980
11	South	997	1,046	1,034	3,077	997	1,046	1,034	3,077	1,330
12	Central	2,956	3,063	3,090	9,109	2,956	3,063	3,090	9,109	3,550
13	Market	8,024	8,346	8,333	24,703	8,024	8,346	8,333	24,703	9,940
14										

Market drill \ **Market Detail** / Measures drill1 / Measures drill2 / M

➤ To access the sample drill-through report from Spreadsheet Add-in:

1 Select a drill-through cell; for example, cell G4.

You can also select a continuous range of cells from the same parent in one dimension to display all drill-through reports associated with the cells that you select. In this example, only one drill-through report is attached to the range of cells.

In order for Integration Server to return a valid drill-through report when multiple cells are selected, all members selected for the multiple-cell drill-through must come from:

- The same physical table and column in the relational source database
- The same member level in the underlying OLAP metaoutline
- The same hierarchy

A multi-cell drill-through operation is valid only if all three criteria noted above are met. A message is displayed if the combination of cells you select is invalid for performing a multi-cell drill-through operation.

2 Select one method to access the **Linked Objects Browser:**

- Select **Essbase, and then Linked Objects** .
- In **Essbase Options** (**Global** page), select **Enable Linked Object Browsing**.

   This option enables you to double-click a linked object cell to open the Linked Objects Browser dialog box.

   This option works only with single-cell selection. If you select a range of cells, use the Essbase Linked Objects menu command.

3 Select the drill-through report entry, and then click **View/Launch.**

4 In **Select Drill-Through Report**, select **Market detail**, and then click **Execute.**

The results of the drill-through report are displayed in a spreadsheet. The results of the Market Detail report shows that the regional director for the East region is John West and that the population for New York is between 18,000,001-21,000,000.

	A	B	C	D	E
1	REGION	DIRECTOR	STATE	POPULATION_ALIAS	
2	East	John West	New York	18,000,001--21,000,000	
3					

If only one report is available for the cells that you select in the spreadsheet, and if that report is not designed to be customized, the drill-through process generates the report and immediately displays the results in the spreadsheet. The person at your organization who develops drill-through reports specifies whether you can customize a report and whether you must log on to access the drill-through report and the relational data source.

5 Follow the steps in to select a report to customize.

Lesson: Selecting Drill-Through Reports to View or Customize

After you launch the drill-through process from the Linked Objects Browser dialog box, Integration Services displays the Select Drill-Through Report dialog box under one or the other of these conditions:

- Multiple drill-through reports exist for the cell or cell range that you select in the spreadsheet.

● Only one report exists, but you can customize it using the Drill-Through Wizard.

The Select Drill-Through Report dialog box displays the list of drill-through reports available for the cells that you select in the spreadsheet. Depending on how a report is defined in Integration Services Console, your access permissions may include only "view," not "customize."

The sample report used for this tutorial is the Measures Detail report. You use the Drill-Through Wizard to customize this sample report.

➤ To customize the sample drill-through report:

1 In `Essdt.xls`, select the **Measures Detail** worksheet.

	A	B	C	D	E	F	G
1							
2				New York			
3			Cola	Diet Cola	Caffeine Free Cola	Colas	Cola
4	Sales	Year	8,940	0	0	8,940	6,518
5	Cost of Goods Sold	Year	3,573	0	0	3,573	783
6	Margin	Year	5,367	0	0	5,367	5,735
7	Total Expenses	Year	1,869	0	0	1,869	630
8	Profit	Year	3,498	0	0	3,498	5,105

Market Detail / Measures drill1 **Measures Detail** / Mea:

2 Select **Essbase**, then **Connect**, and then connect to the sample database.

> **Note:** A sample database for drill-through is not automatically provided with Integration Services. Contact the person at your organization who installs Integration Services to set up a database for you.

3 Select **Essbase**, and then **Options**.

4 In **Style**, under **Data Cells**, select **Integration Server Drill-Through**, and then click **Format**.

The Font dialog box is displayed.

> **Note:** The style for drill-through cells may be set as blue, bold, and italic because you set the style in the previous exercise. If this is the case, go to step 7.

5 From **Font style**, select **Bold Italic.**

6 From **Color**, select **Blue**, and then click **OK.**

In the Essbase Options dialog box, an example of the selected style is displayed in the Sample box.

7 In **Essbase Options**, select **Display.**

8 In **Cells**, select **Use Styles.**

9 Click **OK.**

10 Select **Essbase**, and then **Retrieve.**

In this example, the sample drill-through report is associated with every member intersection at the state level in the East region, so that all data cells associated with an Eastern state and children of Cola are now displayed in blue, bold, italic font.

	A	B	C	D	E	F	G	H
1								
2				New York				Massachusetts
3			Cola	Diet Cola	Caffeine Free Cola	Colas	Cola	Diet Cola
4	Sales	Year	8,940	0	0	8,940	6,518	0
5	Cost of Goods Sold	Year	3,573	0	0	3,573	783	0
6	Margin	Year	5,367	0	0	5,367	5,735	0
7	Total Expenses	Year	1,869	0	0	1,869	630	0
8	Profit	Year	3,498	0	0	3,498	5,105	0

➤ To access the sample drill-through report from Spreadsheet Add-in:

1 Select a drill-through cell; for example, cell G6.

	A	B	C	D	E	F	G	H
1								
2				New York				Massachusetts
3			Cola	Diet Cola	Caffeine Free Cola	Colas	Cola	Diet Cola
4	Sales	Year	8,940	0	0	8,940	6,518	0
5	Cost of Goods Sold	Year	3,573	0	0	3,573	783	0
6	Margin	Year	5,367	0	0	5,367	5,735	0
7	Total Expenses	Year	1,869	0	0	1,869	630	0
8	Profit	Year	3,498	0	0	3,498	5,105	0

If Integration Services is not running, the drill-through process does not launch properly. If drill-through is not launching properly, contact the Essbase system administrator.

If you are prompted with the Drill-Through Login dialog box to connect to Integration Server and the relational data source, enter the connection information. The person at your organization who administers Integration Services and develops drill-through reports should provide you with this information.

2 Select one method to access the **Linked Objects Browser**:

● Select **Essbase**, and then **Linked Objects**.

● In **Essbase Options** (**Global** page), select **Enable Linked Object Browsing**.

This process enables you to double-click a linked object cell to open the Linked Objects Browser dialog box.

This option works only with single-cell selection. If you select a range of cells, use the Essbase Linked Objects menu command.

3 Select the drill-through report entry, and then click **View/Launch**.

The Select Drill Through Report dialog box is displayed.

Note: In the Select Drill Through Report dialog box, if the Customize button is available, you can customize the report. If multiple drill-through reports are displayed, you can select from the various drill-through reports. In this tutorial, only one report, "Measures detail," is displayed and customizable.

4 In **Available Reports**, select **Measures**.

5 Click **Customize**.

Note: The Customize button may or may not be available for a report, depending on how the report was defined in Integration Services Console.

The first screen of the Drill-Through Wizard is displayed.

6 Click **Next** to display **Select Columns and Display Order**.

7 Follow the steps in the topic, "Lesson: Selecting and Ordering Columns" on page 361, to select and order rows for the customized report.

Lesson: Selecting and Ordering Columns

Using the Drill-Through Wizard, you can customize predefined drill-through reports. The first task in using the Drill-Through Wizard is selecting and ordering columns to retrieve from the relational database. These columns contain detailed information that is not available in the Essbase database.

In the Select Columns and Display Order dialog box, you can select which columns you want Integration Services to retrieve from the relational data source. From this dialog box, you can also specify how the columns are displayed in the resulting report.

The Available Columns list consists of columns available from the relational data source for this report (as defined in Integration Services Console). The Selected Columns list box consists of the columns from the Available Columns list in expanded form. You can remove columns from the Selected Columns list to exclude them from the drill-through report.

In this example, the columns from the Available Columns list are selected for inclusion in the sample Measures detail report. These columns are displayed in expanded form in the Selected Columns list.

➤ To remove a selected column from the drill-through report:

1 From **Selected Columns**, select the MARKET.STATE column.

> **Note:** To select multiple columns in the list that are not adjacent to each other, hold down the Ctrl key and select each column. To select a range of columns, hold down the Shift key and click the first and last columns in the list, which also selects all columns in between them.

2 Click ⬛ to move the selected column from the **Selected Columns** list back to the **Available Columns** list.

3 Click **Next** to display **Select Data Sort Order**, and follow the steps in the topic, "Lesson: Ordering Data" on page 361 to further customize the report.

> **Note:** When you finish customizing the report, click Finish to generate the report and view the results in a worksheet. The new sheet is placed before the current sheet.

Lesson: Ordering Data

In the Select Data Sort Order dialog box, you can select an ascending or descending sort order for the data in a column. Sort order determines the order in which rows are displayed in the

drill-through report. For example, you can sort the contents of the Time.TRANSDATE column, which represents the transaction dates, in ascending order in the drill-through report.

➤ To define the sort order of rows in the drill-through report:

1 In the **Available Columns** list, select the Time.TRANSDATE column.

The columns in the Available Columns list box are those that you selected in "Lesson: Selecting and Ordering Columns" on page 361. The columns in the Column list are those for which a sort order is defined in Integration Services Console.

If a data sort order was selected when the report was created in Integration Services Console, the Order By list displays that selection. Otherwise, the default sort order is Ascending.

2 Click ⬚›⬚ to move the Time.TRANSDATE column to the **Column** list , so that you can define a sort order for the column.

3 In the **Column** list, double-click the Time.TRANSDATE column to change the data sort order from Ascending to Descending.

This action causes transaction date values to be displayed in reverse chronological order in the drill-through report.

4 Click **Next** to display **Select Data Filters**, and follow the steps in "Lesson: Filtering Data" on page 362 to customize the report further.

Lesson: Filtering Data

You can create and apply filters to determine what Integration Services retrieves for the drill-through report. You can also save, edit, and delete the filters that you create. For a column, you can retrieve only data that meets certain conditions. For example, the MEASURES.CHILD column in the sample database contains all children of the Measures dimension.

In the sample drill-through report, if you do not apply a filter to this list of measures, Integration Services retrieves all children from the relational source, because the sample drill-through report applies to all children of Measures. In this section, you apply a filter to the MEASURES.CHILD column so that all children of Measures, except Misc, are included in the report.

Note: When you apply a filter on a non-level 0 member using Integration Services, the filter may return more members than expected. To work around this problem, use the Drill-Through Wizard.

➤ To define a filter:

1 In **Column**, select MEASURES.CHILD.

The columns in the Column list box are those that you selected in "Lesson: Selecting and Ordering Columns" on page 361.

If a filter is attached to the column, it is displayed in the Condition column. The full string of the filter is displayed in the lower Condition box.

2 With MEASURES.CHILD selected, click **Add condition**.

The Set Filter on Column dialog box is displayed.

3 From **Column**, select **CHILD.**

The column displayed in the Column list is the one that you selected in step 1 on page 362.

4 From **Operator**, select **< >**, which represents not equal to.

> **Note:** You can select multiple values simultaneously only if you selected In or Not In as the filter operator.

5 Click **Browse** next to **Condition**.

The Select Filter Values from the List dialog box is displayed.

> **Note:** Integration Services retrieves these values directly from the relational data source. If the relational data source contains many values, Integration Services confirms if you want to view them all before it retrieves them from the data source.

6 In **Select Filter Values from the List**, select **Misc**, and then click **OK**.

The Set Filter On Column dialog box is displayed.

7 In **Set Filter On Column**, click **Add**.

The filter defined above causes all children of Measures, except Misc data, to show in the drill-through report.

The Add button becomes unavailable after you create the first filter but becomes available when you create another filter. In this tutorial, you are creating only one filter. The And and Or options are used when combining multiple filters. The default value is Or—Integration Services applies the filter if one or more of the specified conditions are met. If you select And, Integration Services applies the filter only if *all* conditions are met.

8 Click **OK**.

Notice that the filter defined in the Set Filter on Column dialog box is displayed in the Condition column and the Condition box of the Select Data Filters dialog box.

You can also create a filter by typing the filter conditions directly into the Filters box of the Set Filter on Column dialog box.

To clear a filter for a selected column, select the filter and click Clear. To clear all filters for all columns, click Clear All.

You can save the filter that you created and apply it to the MEASURES.CHILD column, so that all children of Measures, except Misc, are included in the report.

➤ To save the filter that you just created:

1 In **Select Data Filters**, click **Add new filter**.

The Filter Name dialog box is displayed.

2 In **Name**, enter the name for the filter that you are creating.

For this tutorial, enter `All Children of Measures except Misc.`

3   Select **Copy definition of current filter.**

Selecting Copy definition of current filter gives the filter the same description and conditions as the filter currently selected in the Select Data Filters dialog box.

4   Click **OK.**

The filter is added to the list of saved filters in the Select Data Filters dialog box.

5   Click **Save Filters.**

6   Click **Finish** to apply the filter to the MEASURES.CHILD column, so that all children of Measures, except Misc, are included in the report.

> **Note:**   You can delete and rename filters.

Integration Services generates the customized drill-through report and displays the results in a worksheet that is added to the workbook before the current worksheet.

In this sample, the customized drill-through report reflects the specifications that you set using the Drill-Through Wizard:

● The Time.TRANSDATE column is sorted in descending order, displaying the transaction dates in reverse chronological order.

● All children of Measures, Additions, COGS, Marketing, Payroll, Sales, and Opening Inventory, except Misc, are displayed as you specified in the filtering part of the Drill-Through Wizard.

> **Note:**   When a filter is applied to a drill-through report, quotation marks are added to the column header.

Lesson: Disconnecting from Essbase

When you finish using drill-through, disconnect from Essbase to make a port available on the server for other Spreadsheet Add-in users.

➤ To disconnect from the server:

1   Select **Essbase,** and then **Disconnect.**

The Essbase Disconnect dialog box is displayed, from which you can disconnect spreadsheets that are connected to a database.

Essbase may return an error message when you attempt to disconnect after using drill-through. If an error message is returned, select Essbase, then Retrieve, and then disconnect.

2   Select a sheet name from the list, and then click **Disconnect.**

3   Repeat step 2 until you disconnect from all active sheets.

4 Click **Close**.

> **Note:** You can also disconnect from the server by closing the spreadsheet application. An abnormal shutdown of a Spreadsheet Add-in session, such as a power loss or system failure, does not disconnect you from the server.

D

Dialog Boxes

In This Appendix

Spreadsheet Add-in Dialog Boxes

Subtopics

Essbase Options Dialog Box

The Essbase Options dialog box contains controls that determine the behavior of worksheets, spreadsheet styles, and actions in your Essbase session. It includes these tabs:

> **Note:** For a list of formula preservation restrictions, view the Mode page and click the controls in the Formula Preservation group.

To save the option settings in a worksheet, you must explicitly go to the Essbase Options dialog box and set the options before saving the worksheet. Otherwise, when you open the same

worksheet in another Spreadsheet Add-in session, the options settings for the current session override previous worksheet settings. Ensure that the worksheet for which you saved option settings is not a protected worksheet. Essbase cannot save option settings for a protected worksheet.

Display Page (Essbase Options Dialog Box)

The Display page controls the use of styles, nested displays, row suppression, the automatic adjustment of columns, automatic sorting order, display of member labels, latest period setting, and the display of aliases. It also enables you to define a label for missing values and for data that you cannot access.

Dialog Box Items

- **None**—Select to specify no member indentation (parents and children appear left-justified in the worksheet column).

- **Subitems**—Select to specify that descendants are indented while ancestors appear left-justified in the worksheet columns.

- **Totals**—Select to specify that ancestors are indented while descendants appear left-justified in the worksheet columns.

- **#Missing Label**—Enables you to define a label for missing values. By default, missing values are labeled `#Missing`.

  > **Caution!**   #Missing labels must not match member names or aliases in the outline.

- **#No Access Level**—Enables you to specify a label for data you cannot access. This option is available only when Advanced Interpretation mode is selected on the Mode page of the Essbase Options dialog box.

  > **Caution!**   #No Access Level labels must not match member names or aliases in the outline.

- **Missing Rows**—Select to suppress the return of data rows that contain only missing values

  If you select an option in the Formula Preservation group on the Mode page, the #Missing Rows option is not available.

  If you clear **#Missing Rows**, Essbase does not redisplay `#Missing` data in the spreadsheet. To display `#Missing` again, clear the option and open another worksheet.

- **Zero Rows**—Select to suppress the return of data rows which contain only zeros.

  If you select an option in the Formula Preservation group on the Mode page, the Zero Rows option is not available

  If you clear **Zero Rows**, Essbase does not redisplay data containing zeros in the spreadsheet. To display zero data again, clear the option and open another worksheet.

- **Underscore Characters**—Select to suppress the display of underscore characters in member names.

- **Use Aliases**—Select to display aliases when performing retrievals, rather than database outline member names. Aliases are alternate names for database members. You can create reports that use the database outline member name, which is often a stock number or product code, or an alias name, which can be more descriptive. Each database can contain one or more alias tables. Select the alias table from the Alias list box.

  If you select Show Qualified Member Name on Sheet, the qualified name display overrides the display of aliases.

- **Use Both Member Names and Aliases for Row Dimensions**—Select to display the member name and alias name for each row dimension member in the worksheet.

  If you select the Show Qualified Member Name on Sheet, the qualified name display overrides the display of aliases

- **Show Qualified Member Names on Sheet**—Select to view the qualified member name of duplicate members on the worksheet.

  This option is only available when you are connected to a database that supports duplicate member names.

- **Show Qualified Member Names as Comments**—Select to view the qualified member name of duplicate members when you hover the cursor over the comment indicator in a cell.

  This option is only available when you are connected to a database that supports duplicate member names.

- **Use Styles**—Select to display styles defined for members, dimensions, or data cells.

- **Adjust Columns**—Select to automatically adjust the column widths in the spreadsheet to accommodate large member, or alias, names.

- **Auto Sort Rows**—Select to retrieve data into symmetric rows which are sorted according to the order specified in the database outline. This option is only available when Free Form retrieve mode (but not Template Retrieve) is selected.

- **Repeat Member Labels**—Select to repeat all member labels after a retrieve. For large spreadsheets, this may be a useful feature so that you can immediately see the member label associated with the data.

  Essbase retains the repeated members in the spreadsheet even if you clear Repeat Member Labels. To suppress the repeated members from displaying in the spreadsheet, perform one action:

  - Clear Repeat Member Labels and open another worksheet.

  - Clear Repeat Member Labels, pivot the repeated members, and pivot the members again.

  - Use the FlashBack command to return to the previous view before applying Repeat Member Labels, if you did not perform other actions since you retrieved.

- **Alias**—Displays all alias tables contained in the active database.

- **Use Sheet Options with Query Designer**—Select to apply the options selected in the options dialog box to queries created by Query Designer.

- **Latest Time Period**—Select to specify the latest time period for Dynamic Time Series reporting.

- **Latest Time Period**—Displays all level 0 members for a Time dimension.

Zoom Page (Essbase Options Dialog Box)

The Zoom page controls the behavior of all Zoom In operations except within the selected group.

Dialog Box Items

- **Next Level**—Select to retrieve data for the children of the selected member or members, which is the default zoom option. For example, in the Sample Basic database, a zoom in on Year retrieves Qtr1, Qtr2, Qtr3, and Qtr4.

- **All Levels**—Select to retrieve data for all descendants of the selected member or members. For example, in the Sample Basic database, a zoom in operation on Year retrieves all quarterly and monthly members.

- **Bottom Level**—Select to retrieve data for the lowest level of members in a dimension. For example, in the Sample Basic database, a zoom in operation on Year retrieves Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, and Dec.

- **Sibling Level**—Select to retrieve data for the siblings of the selected member or members. For example, in the Sample Basic database, a zoom in operation on Jan retrieves Jan, Feb, and Mar.

- **Same Level**—Select to retrieve data for all members at the same level as the selected member or members. For example, in the Sample Basic database, a zoom in operation on Sales retrieves COGS, Marketing, Payroll, Misc, Opening Inventory, Additions, Ending Inventory, Margin %, and Profit %.

- **Same Generation**—Select to retrieve data for all members of the same generation as the selected member or members. For example, in the Sample Basic database, a zoom in operation on Sales retrieves COGS, Marketing, Payroll, and Misc.

- **Formulas**—Select to retrieve data for all members those are defined in the formula of the selected member or members. The formula can be a member equation or a consolidation to the parent. For example, in the Sample Basic database, a zoom in operation on Margin % retrieves Margin and Sales.

- **Include Selection**—Select to retain the selected member and the other members retrieved as a result of the zoom. By default, Include Selection is enabled. For example, in the Sample Basic database, a zoom in on Qtr1 retrieves data for Jan, Feb, and Mar, and Qtr1. When this option is disabled, the zoom in retrieves only Jan, Feb, and Mar; Qtr1 is eliminated.

- **Within Selected Group**—Select to apply only to the group of members in which the selection is made. By default, this setting is disabled. This setting is only meaningful when the worksheet contains two or more dimensions of data down a worksheet as rows or across a worksheet as columns. (This setting also affects the behavior of Keep Only and Remove Only operations.)

- **Remove Unselected Groups**—Select to remove all dimension groups that are not in the selected group.

> **Note:** Remove Unselected Groups is not available when you select Retain on Zooms on the Mode page.

- **Enable Hybrid Analysis**—Select to display members from a Hybrid Analysis relational source in the report. By default, this option is not selected. In the Outline Editor of Administration Services Console, if the Hybrid Analysis tag for a dimension is disabled, this tag setting overrides the Enable Hybrid Analysis setting.

> **Note:** If the outline contains multiple levels of Hybrid Analysis members, a zoom out operation on the bottom level Hybrid Analysis member takes you to the Essbase parent member, thus bypassing all other Hybrid Analysis levels.

- **Sampling Percentage**—Enter an integer between 1 and 100 to represent the approximate percentage amount of an Essbase cube to query during a Zoom In operation. If Hybrid Analysis is enabled and in use, this percentage also applies to queries to the underlying relational database.

  For example, if you enter 50, approximately 50% of the members of the Essbase database and, if applicable, the specified columns of the relational database are queried when you select the Zoom In command.

  The default value is 100.

  To use this functionality, the sampling feature must be enabled. Use the Sample Data (Zoom In) command to enable sampling.

> **Note:** Sampling does not support drill down on level 0 attribute members.

Mode Page (Essbase Options Dialog Box)

The Mode page controls Advanced Interpretation, Free Form retrieval, Update mode, and Formula Preservation settings.

Dialog Box Items

- **Advanced Interpretation**—Select to retrieve data into a spreadsheet using optimized querying. This is the default option.

- **Free Form**—Select to enter report script commands into the report.

> **Note:** If you are connected to an application and database that supports duplicate member names, you cannot perform Free-Form retrievals.

- **Template Retrieve**—Select to define reports using the Essbase report script command language. Report script commands let you select data items and place them in a row or column of the worksheet. The major difference between template retrieve mode and the standard retrieval mode is its ability to dynamically query branches of members in dimension trees. For example, if you must create a report that shows every product, including those added since the last retrieval, standard retrieval mode only reflects these changes when you zoom in on the product.

❍ In Template Retrieve mode, the Zoom, Keep Only, Remove Only, and Pivot options are unavailable.

❍ If you are connected to an application and database that supports duplicate member names, you cannot use Template Retrieve mode.

● **Update Mode**—Select to automatically lock the corresponding database area with each retrieval. You must disable Update mode to stop locking blocks automatically.

Note: Update mode applies only to block storage databases.

When you are in Update mode, the Send command (which updates the server with data values from your spreadsheet) does not automatically unlock data after the send.

❍ **Retain on Retrieval**—Select to define retrievals which retain formulas in the worksheet.

❍ Select Advanced Interpretation to enable Retain on Retrieval.

❍ Select the Retain on Retrieval and Essbase disables the #Missing Rows and Zero Rows suppress options on the Display page.

By default, a retrieve overwrites formulas in the retrieval area of a worksheet with data values. The retrieval process also eliminates formulas in cells outside the retrieval area.

● **Retain on Keep and Remove Only**—Select to retain formulas in the worksheet after a Keep Only or Remove Only operation.

Note: You must select Retain on Retrieval to enable the Retain on Keep and Remove Only options.

● **Retain on Zooms**—Select to retain formulas in the worksheet after a Zoom In operation. This option applies to zooming in and out on a member.

❍ If you select Retain on Retrieval, Retain on Zooms is enabled.

❍ If you select Retain on Zooms, the Remove Unselected Groups option on the Zoom page is not available.

● **Formula Fill**—Select to replicate the formulas and formatting styles found in the underlying region.

Formula Fill becomes available when you select Retain on Zooms.

Style Page (Essbase Options Dialog Box)

The Style page enables you to assign font style and color formatting to help distinguish types of cells or members. The order of precedence for the styles is: Linked Objects, Integration Server Drill-Through, Read Only, Read/Write, Parent, Child, Shared, Contains Formula, Dynamic Calculations, attributes, and members in a dimension.

Note: The Style page is available only when you are connected to a database.

Dialog Box Items

- **Members**—Displays the controls for changing the font formatting of parent, child, shared, formula, Dynamic Calc, and attribute members. If the same style is applied to two or more members, the order of precedence is as follows: Linked Objects, Integration Server Drill-Through, Read Only, Read/Write, Parent, Child, Shared, members containing formulas, dynamic calculations, attributes, and members of a dimension.

- **Dimensions**—Displays the controls for changing the font formatting of the dimensions in the outline. If the same style is applied to two or more members, the order of precedence is as follows: Linked Objects, Integration Server Drill-Through, Read Only, Read/Write, Parent, Child, Shared, members containing formulas, dynamic calculations, attributes, and members of a dimension.

- **Cell Border**—Select to apply a border around the cell of the dimension.

- **Background Color**—Enables you to select from a list of colors to apply to the cell background of the selected dimension.

- **Format**—Click to display the Font dialog box, which you use to select the formatting styles for the selected item.

- **Sample**—Enables you to preview the formatting style (visual cue) attached to the selected item.

- **Connection Information**—Displays the database to which you are currently connected.

Global Page (Essbase Options Dialog Box)

The Global page enables you to set options that affect all worksheets and actions in your Essbase session.

Dialog Box Items

- **Limit to Connected Sheets**—Select to enable compatibility between Spreadsheet Add-in and Oracle Hyperion Smart View for Office, Fusion Edition.

  When selected, Spreadsheet Add-in reacts to mouse clicks only in worksheets that are connected to an Essbase application and database.

- **Enable Secondary Button**—Select to use the secondary mouse button for pivot and zoom operations.

- **Enable Double-Clicking** —Select to retrieve and zoom in on data by double-clicking the primary button, and zoom out by double-clicking the secondary button.

- **Enable Linked Object Browsing**—Select to access the Linked Objects Browser dialog box when you double-click a cell containing a linked object.

- **Information**—Select to display information for every Essbase action, including all warning and error messages.

- **Warnings**—Select to display only warning and error messages. Warning messages contain critical information that may affect your session. This is the default setting and the recommended minimal message level setting.

- **Errors**—Select to display an error message whenever an action does not successfully complete.

- **None**—Select to specify that messages (information, warning, or error) do not display.

- **Display Unknown Members**—Select to display names in a retrieval request that do not match member names of the database. This option is enabled by default.

- **Display Save Dialog**—Select to save a member selection when you exit the Essbase Member Selection dialog box.

- **Route Messages to Log File**—Select to send a copy of all messages to the log file. When this option is selected, all messages are sent to `/ESSBASE/MESSAGES.LOG` on your computer. By default, Essbase sends messages to the screen only. This option does not affect other settings in the Display Messages group.

- **Purge Log File Every Session**—Select to delete the log file each time you start an Essbase session. This option is enabled by default. Regular purging of the log file prevents it from growing too large.

- **Navigate without Data**—Select to perform spreadsheet operations such as Zoom In, Zoom Out, Pivot, Keep Only, Remove Only, and Retrieve without returning data. This option is useful in terms of performance when dealing with Dynamic Calc members. This option enables you to get to the desired view of the worksheet without waiting for data retrieval until you need it. Clear Navigate Without Data when you are ready to retrieve data.

  By default, this option is not selected.

- **Add-Ins**—Click to open the Add-In Manager dialog box which enables you to install and configure custom add-ins developed with the Essbase API. For information on developing custom add-ins, contact Oracle Corporation.

Essbase System Login Dialog Box

The Essbase System Login dialog box enables you to connect to Essbase. Select the server you want to access from the Server list box. (If server names are not in the list, you can enter the name of the server to access.)

Dialog Box Items

- **Server**—Select the server you want to access from the Server list box. (If server names are not in the list, you can enter the name of the server you want to access). If you do not know the name of the instance of Essbase Server, contact the Essbase System Administrator.

- **Username**—Enables you to enter your user name. If you do not know your Essbase user name, contact the Essbase System Administrator.

- **Password**—Enables you to enter your password. If you do not know your Essbase password, contact the Essbase System Administrator.

- **Change Password**—Click to change your password.

- **Application/Database**—Displays a list of available application and database pairs. If you change servers during a session, you can use the Update button to refresh the information in the list.

- **Update**—Click to refresh the information in the Application/Database list.
- **Note**—Click to display Database Note dialog box. The Database Note dialog box displays a note for the active database.

Essbase Disconnect Dialog Box

The Essbase Disconnect dialog box enables you to disconnect a worksheet that is connected to a database. This dialog box displays the databases to which you are currently connected.

Dialog Box Items

- **Sheet/Server: Application->Database**—Displays the name of the servers, applications, and databases to which you are currently connected.
- **Disconnect**—Click to disconnect from the selected server, application, and database combination.

Change Password Dialog Box

The Change Password dialog box enables you to change your password. You can change your password only if you are connected to a server.

Essbase Member Selection Dialog Box

Essbase provides a member selection command that enables you to pick member names from a list, apply subsetting values to further define the selection, perform searches for members, preview your selection, and open and save selection objects.

Member selection is accessed from Spreadsheet Add-in and Partitioning. The dialog box controls that are displayed differ depending on the application used to access member selection.

Dialog Box Items

- **Dimension**—By default, displays the name of the dimension associated with the active cell. Select other dimensions to display from the list. For each dimension selected, members are displayed in the Members list box.
- **Members**—Lists members associated with the dimension displayed in the Dimension list box. You can locate one or more members by expanding dimensional branches. If the view method is set to By Generation Name, By Level Name, or By Dynamic Time Series, the Members list box displays the generation names, level names, or Dynamic Time Series names, respectively. The number in parentheses next to the member indicates how many children the member contains. Members that are marked for Hybrid Analysis are displayed in blue. Use the Dimension list box to select another dimension to display.
- **Find**—Click to display the Find Member dialog box, which you can use to locate members, within the selected dimension, that match a text string.

- **Clear**—Click to clear all selections, including selections hidden in the collapsed hierarchies, from the Members list box.

- **Latest**—Click to display the Select Latest Period dialog box, where you select the level 0 member in a time dimension. For use with the By Dynamic Time Series option only in Partitioning.

- **Expand to Descendants**—Click or enter Alt+x to expand the list in the Members list box to display the descendants for the selected member. If you select multiple members, Essbase displays the descendants for all selected members.

Caution!   For dimensions containing a large number of members, you may experience a delay while Essbase is expanding.

- **Member Information**—Click to display the Member Information dialog box, which provides dimension, generation, level, user-defined attributes, member comments, storage setting and formula information for the selected member. If you select multiple members, Essbase displays the member information for the last member you selected.

- **By Member Name**—Enables you to select members using member names. If the Use Aliases option is also selected, Essbase lists the member names using aliases. By default, the By Member Name option is selected.

- **By Generation Name**—Enables you to select members using generation names. If the Application Designer defined generation names, they appear in this list. Otherwise, Essbase displays the default generation names.

- **By Level Name**—Enables you to select members using level names. If the Application Designer defined level names, they appear in this list. Otherwise, Essbase displays the default level names.

- **By Dynamic Time Series**—Enables you to select Dynamic Time Series members when a time dimension is displayed.

- **Add**—Click to add all selected items, displayed or in collapsed hierarchies, from the Members list box to the Rules list box. Use the selection count below the Members list box to verify the number of items selected. Alternatively, double-clicking an item in the Members list box also adds one member.

- **Rules**—Displays the members you added from the Members list box and all rules you created for the member. Select a member in the Rules list box and click the right mouse button to open a shortcut to further define the members you selected. If duplicate members are selected, hover over the duplicate member names to view the qualified member name.

- **Move Item Up**—Click to change the order in which members are selected for reporting. This button moves the selected item, and its associated subset conditions in the Rules list box, up one position each time you click the button. You can move only the top-level item (the item you added from the Members list box), not the subset conditions.

- **Move Item Down**—Click to change the order in which members are selected for reporting. This button moves the selected item, and its associated subset conditions in the Rules list box, down one position each time you click the button. You can move only the top-level item (the item you added from the Members list box), not the subset conditions.

- **Remove Item**—Click to remove a selected item and its associated subset selection criteria from the Rules list box. The Remove Item button becomes available when you select a top-level item (an item you added from the Members list box).

- **Remove All**—Click to remove all items from the Rules list box.

- **Use Aliases**—Select to display member aliases from the current alias table, when the view method is set to By Member Name. If an alias does not exist for a member, Essbase displays the member name. Select from the list of alias tables associated with this database. To add alias tables, see the *Oracle Essbase Administration Services Online Help*. By default, this option is not selected.

- **Suppress Shared Members**—Select to prevent shared members from appearing multiple times in the worksheet. This option is available only when the selected items are generation or level names. By default, this option is not selected.

- **Place Down the Sheet**—Select to insert members down a column. When this option is cleared, Essbase inserts members across a row. By default, this option is selected. This option may not be available in all Essbase Member Selection dialog boxes.

- **Insert List Before Active Cell**—Select to insert members before an active cell. When this option is cleared, Essbase overwrites the active cell. By default, this option is cleared.

- **Open** —Click to display the Open Selection Object dialog box, which enables you to select from a list of saved member selections.

- **Save**—Click to display the Save Selection Object dialog box, which enables you to save member selections you defined.

- **Preview**—Click to display the Member Preview dialog box that shows a list of members meeting the selection rules.

Linked Objects Browser Dialog Box

The Linked Objects Browser dialog box lists the objects that are linked to the currently selected cell. The browser enables you to view, edit, and delete individual objects. To perform an action on an object, first click it to select it, and click one of the buttons.

Notes:

- If member combinations contain attributes, do not create linked objects.

- If the Read Only Spreadsheet Add-in flag is turned on, the Attach, Edit, or Delete buttons are not available on the Linked Object Browser dialog box. So to attach, edit, or delete linked objects, you need proper access permissions.

Dialog Box Items

- **Member Combination**—Shows the member combination associated with the selected linked object. If no linked object is selected, no member combination is displayed.

- **Object Type**—Displays information about the objects linked to the currently selected cell or cells.

- **Object Description**—Entered by the user who created the object. For cell notes, this is the content of the note.

- **Linked Object and Object**—Displays a description of the object. For URLs, the complete URL address is displayed. This field is blank for other object types, such as cell notes

- **Created By**—Displays the name of the user who created the object.

- **Last Modified**—Displays the date and time when the object was last modified.

- **Attach**—Click to display the Attach Linked Object dialog box and enables you to create a cell note, attach a linked file or URL to the selected data cell.

- **Edit**—Click to edit the contents of a cell note, re-attach a linked file, or edit the URL address. If the selected linked object is a cell note, the Edit Cell Note dialog box is displayed. If the selected linked object is a linked file, the Re-Attach Linked Object dialog box is displayed. If the selected linked object is a URL, the Edit URL dialog box is displayed.

- **View/Launch**—Click to open the View Cell Note dialog box to read (but not edit) the contents of a cell note, launch the associated application for a linked file, open a Web browser to view a URL, or access Integration Server Drill-Through reports. If you change the contents of a linked file and want to update Essbase, first save the file locally, and click the Edit button to re-attach the saved file.

- **Delete**—Click to delete the selected linked object from Essbase.

Related Topics

"Linked Reporting Objects Dialog Box" on page 379

Linked Reporting Objects Dialog Box

The Linked Reporting Object dialog box enables you to specify criteria for selecting LROs in the current database. You can select objects by specifying a modification date and/or user name. To select all objects, clear By Date and By User.

Dialog Box Items

- **By Date**—Select to enter a modified date for selecting objects. Objects modified on or before the date you enter are selected. If you do not want to select objects by modification date, clear By Date.

- **By User**—Select to specify a user name for selecting objects. Objects last modified by the specified user are selected. To specify a user, click the user name in the list box. If you do not want to select objects by user, clear By User.

- **Preview**—Click to display Linked Objects Browser with the objects that meet your criteria. You might want to preview objects before deleting them. While previewing, you can also view and edit the contents of cell notes linked files, and URLs.

- **Delete**—Click to delete the objects from Essbase, if the objects meet your criteria. A confirmation dialog box is displayed before Essbase deletes them. Before deleting, you may click Preview to ensure the correct objects are selected.

Related Topics

Font Dialog Box

The Font dialog box enables you to specify font, font style, size, effects, and color for dimension and member labels and data cells.

Dialog Box Items

- **Font**—Enables you to select a font from the list.

- **Font Style**—Enables you to select a font style for the selected item.

- **Font Size**—Enables you to select a size for the selected item.

- **Strikeout**—Enables you to strikeout the selected item.

- **Underline**—Enables you to underline the selected item.

- **Sample**—Enables you to preview the formatting style (visual cue) attached to the selected item.

- **Color**—Enables you to select and apply color to the selected item form the list.

- **Script**—Enables you to select a script style from the list.

Essbase Cascade Options Dialog Box

The Essbase Cascade Options dialog box enables you to replicate worksheets using member combinations. It contains these tabs:

Cascade Information Page (Essbase Cascade Options Dialog Box)

The Cascade Information page specifies the members on which cascade is to be based.

Dialog Box Items

- **Member Information**—Displays the members that serve as the basis for the cascade operation. The cascade level to be performed is also indicated next to the member name.

- **Next Level**—Select to create a worksheet for the children of each cascade member. This is the default cascade option.

- **All Levels**—Select to create a worksheet for the descendants of each cascade member.

- **Bottom Level**—Select to create a worksheet for all bottom-level members of each cascade member.

- **Sibling Level**—Select to create a worksheet for the siblings of each cascade member.

- **Same Level**—Select to create a worksheet for all members at the same level as each cascade member.

- **Same Generation**—Select to create a worksheet for all members of the same generation as each cascade member.

- **Formulas**—Select to create a worksheet for all members in the formula of the cascade member.

Related Topics

"Destination Options Page (Essbase Cascade Options Dialog Box)" on page 381

"Format Options Page (Essbase Cascade Options Dialog Box)" on page 382

Destination Options Page (Essbase Cascade Options Dialog Box)

The Destination Options page enables you to select where and in what form the cascaded worksheets are to be created, and specify the prefix and suffix of the file names or workbooks.

Dialog Box Items

- **Destination Directory**—Enables you to specify the directory where the cascade operation is to create the worksheets.

- **Browse**—Click to display the Browse dialog box to locate the desired directory.

- **Separate Workbooks**—Select to place the cascaded worksheets into multiple workbooks.

- **One Workbook, Separate Sheets**—Select to place cascaded worksheets into multiple worksheets within one workbook.

- **Printer**—Select to send cascaded worksheets to the default printer.

- **Printer**—Click to display the Printer dialog box to specify the printer to use.

- **Open Created Files**—Select to open each file in the spreadsheet, as it is created.

  A cascade can create more worksheets than can fit into memory. Therefore, the Open Created Files option should not be used with a large number of worksheets.

- **Overwrite Existing Files**—Select to indicate that cascaded worksheets replace worksheets with matching names, which is the default setting.

- **Prefix**—Enables you to assign a prefix to the file names Essbase creates. By default, Essbase generates worksheet names that are numbered incrementally, starting from 1. For example, if a prefix of BUD is defined, Essbase names the worksheets: BUD1, BUD2, and so on.

  If you do not specify a prefix or suffix, Essbase names the worksheets incrementally 1, 2, and so on.

  Do not specify a prefix and suffix combination that leaves no characters free for Essbase to create unique file names. If you duplicate file names, Essbase overwrites the duplicate with the last cascaded worksheet.

- **Suffix**—Enables you to assign a suffix to the file names Essbase creates. By default, Essbase generates worksheet names that are numbered incrementally, starting from 1.

  If you do not specify a prefix or suffix, Essbase names the worksheets incrementally 1, 2, and so on.

  Do not specify a prefix and suffix combination that leaves no characters free for Essbase to create unique s. If you duplicate file names, Essbase overwrites the duplicate with the last cascaded worksheet.

- **Workbook**—Enables you to specify a name for the workbook.

Related Topics

Format Options Page (Essbase Cascade Options Dialog Box)

The Format Options page enables you to specify header and footer information, suppress missing rows, and generate a list of the files created for your worksheets.

Dialog Box Items

- **Copy Formatting**—Select to copy the formatting (styles set using the Style page of the Essbase Options dialog box) of the source worksheet into each cascaded worksheet.

  Copy Formatting does not copy formulas, column formatting, worksheet formatting, or graphs. It does copy styles you set using Essbase and cell formatting you set using the spreadsheet.

- **Header**—Enables you to specify a header name for all cascaded worksheets.

- **Footer**—Enables you to specify a footer name for all cascaded worksheets.

- **Suppress Missing Rows**—Select to exclude missing rows from appearing in the cascaded worksheets.

- **Include Table of Contents**—Select to create a text file containing a list that displays the member content and the dates of the cascade files. This file is named `Prefix0Suffix.LST`.

Related Topics

Essbase Calculation Dialog Box

The Essbase Calculation dialog box enables you to calculate the database if your access permissions are adequate.

When the calculation completes, a message saying that the calculation is finished is displayed.

Note: If the last calculation occurred on a subset of the data, the entire database may not have been calculated since values last changed. To ensure that calculation results are up-to-date, you can calculate the entire database.

Dialog Box Items

- **Connection Information**—Displays the active database connection.

- **Select Calc Script**—Displays the server-based calculations that you can access.

- **Calculate**—Click to start a calculation on the server

- **Stop Calc**—Click to terminate the running calculation

- **Database State information box**—Displays a message indicating the current calculation state of the database. These states are possible:

  - ❍ **Calculating** indicates that a calculation is currently running on the database.

  - ❍ **Data values have been modified since the last calculation** indicates that data values changed since the database or database subset was last calculated.

  - ❍ **No data values have been changed since the last calculation** indicates that the data did not change since the database or database subset was last calculated.

Subset Dialog Box

The Subset dialog box enables you to apply additional rules to a subset of members. With the Subset dialog box, you can specify members having certain user-defined attributes (UDAs), select members using generation names and level names, match a certain pattern string, define conditional logic, and group conditional expressions. Having these subsetting options gives you more flexibility in defining selection rules.

Note: The maximum number of conditions you can set in the Subset dialog box is 50 items.

Dialog Box Items

- **Select member "" and its descendants where**—Displays the subsetting methods available based on the type of item you selected.

- **is** or **is not**—Displays filtering criteria. When you select is, the filtering criteria needs to equal the specified value. When you select is not, the filtering criteria excludes the members that meet the selected condition.

- **third**—Displays the corresponding values for the subsetting methods.

- **Add as OR Condition**—Click to add the selected subsetting condition to Conditions to be evaluated using OR logic (the selection must meet the current condition or the one before it). For example, if you want to define subset conditions for the descendants of Market:

Pattern Matching C* or Generation of Region:

Connecticut, California and Central begin with the letter "C" and Central, East, West, and South are members of generation Region, thus meeting one or more of the conditions.

A preview produces:

Connecticut, California, Central, East, West, South.

- **Add as AND Condition**—Click to add the selected subsetting condition to Conditions to be evaluated using AND logic (the selection must meet the current condition and the one before it). For example, if you want to define subset conditions for the descendants of Market:

Pattern Matching C* and Generation of Region:

Central begins with the letter "C" and is a member of generation Region, thus meeting both conditions.

A preview produces:

Central.

- **Conditions**—Displays the subsetting conditions. Essbase uses these conditions to include or exclude members based on the conditions defined.

- **Remove Item**—Click to remove the selected item from Conditions.

- **Add [**—Click to add a left parenthesis to the selected item. Use parentheses to group two or more subsetting values to determine priority of order for the conditions. Each item in Conditions can contain a left or right parenthesis, but not both.

- **Add]**—Click to add a right parenthesis to the selected item. Use parentheses to group two or more subsetting values to determine priority of order for the conditions. Each item in Conditions can contain a left or right parenthesis, but not both.

- **Remove ( )**—Click to remove a left or right parenthesis from the selected item in Conditions

- **Remove All ( )**—Click to remove all parentheses defined in Conditions.

- **Preview**—Click to display the Member Preview dialog box that shows a list of members meeting the selection.

Find Member Dialog Box

The Find Member dialog box enables you to locate member names, within a selected dimension, that match a text string you enter. To locate multiple members, click the Find Next button. The Find Member dialog box locates the members that match the text string in outline order and keeps them selected so that they can be selected as a group.

You can use the trailing asterisk wildcard, *, and single-character wildcard, ?, in text strings. The * wildcard replaces a string of characters, whereas the ? wildcard replaces one character. J?n and 100* are examples of valid wildcard strings and *-10 and J*n are examples of invalid wildcard strings.

To locate members within other dimensions, close the Find Member dialog box and select another dimension to search in the Dimension list box of the Essbase Member Selection dialog box.

Dialog Box Items

- **Find Member**—Enables you to enter the text string you want to locate.

- **Find**—Click to locate the first occurrence, within the selected dimension, of the text string you typed.

- **Find Next**—Click to locate and select subsequent occurrences, within the selected dimension, of the text string you typed. The Find Next button becomes disabled when it locates the last occurrence of the text string.

Member Preview Dialog Box

The Member Preview dialog box enables you to preview the list of members meeting the selection criteria in the Rules list box, and displays the number of selected members at the bottom of the dialog box.

If you apply the subsetting rules to the members, the Member Preview dialog box expands the rules to member names. For example, if the subset is:

Qtr1, All Children

The Member Preview dialog box displays Jan, Feb, and Mar.

If you use the Find button to do a search on a member, and the search finds one or more matches for the search, the Member Preview dialog box displays the members once. The same holds true for overlapping subsetting rules. For example, if the subset is:

Year, All Children

 Qtr1

The Member Preview dialog box displays Qtr1, Qtr2, Qtr3, and Qtr4 once.

Note: If the rules do not produce members, the Member Preview dialog box displays only the dimension. For example, if the subset is 400, Pattern Matching 300*, the Member Preview dialog box displays only the Product dimension member because no members begin with 300 in the product code 400.

Select Latest Period Dialog Box

The Select Latest Period dialog box enables you to select the level 0 member in a time dimension. The level 0 member is the latest period for a Dynamic Time Series calculation. By default, the first level 0 member is selected.

Open Selection Object Dialog Box

The Open Selection Object dialog box retrieves selection rules that you saved. This feature is useful because you can recall selection criteria for a dimension and optionally append it with the current selection criteria.

Dialog Box Items

- **Location**—Specifies the location of the member selection. Select Server or Client.

- **Connection Information**—Displays which server, application, and database you are connected to.

- **Selection Object**—Enables you to enter the name of the member selection object.

- **Application**—Enables you to select from a list of applications that are available on the server or client.

- **Available Selection Objects**—Enables you to select from a list of available member selection objects.

- **Database**—Enables you to select from a list of databases that are available on the server or client.

- **Lock Object**—Select to lock a selection rules object so that no other user can modify it while you are using it.

- **Merge with Existing Selection Rules**—Select to append the criteria in the selection rules object you selected with the current criteria in the Essbase Member Selection dialog box. If you open another selection object and do not select Merge with Existing Selection Rules, Essbase unlocks all previously opened selection objects.

- **File System**—Click to display the Open dialog box, which enables you to specify a location when you open a selection rules object from your computer. This button becomes available when you select the Client option in the Location group.

Save Selection Object Dialog Box

The Save Selection Object dialog box enables you to save selection rules you created so that you can recall the selection rules at a later date. Essbase saves selection rules in a rules format with the extension SEL, not in explicit member lists, making them dynamic and able to incorporate outline changes.

Notes:

- Changes to an outline may cause the selection rules objects to become obsolete. Essbase cannot automatically detect whether a selection rules object is obsolete based on the outline.

- Having access permissions of Database Designer or higher enables you to save data to the server. Contact your System Administrator.

Dialog Box Items

- **Location**—Specifies the location of the member selection. Select Server or Client.

- **Connection Information**—Displays which server, application, and database you are connected to.

- **Selection Object**—Enables you to enter the name of the member selection object.

- **Application**—Enables you to select from a list of applications that are available on the server or client.

- **Available Selection Objects**—Enables you to select from a list of available member selection objects.

- **Database**—Enables you to select from a list of databases that are available on the server or client.

- **File System**—Click to display the Open dialog box, which enables you to specify a location when you open a selection rules object from your computer. This button becomes available when you select the Client option in the Location group.

Attach Linked Object Dialog Box

The Attach Linked Object dialog box enables you to attach a cell note, an external file, or a URL location to a data cell. The view of the Attach Link Object dialog box changes according to which option you select:

- "Cell Note Option Selected (Attach Linked Object Dialog Box)" on page 387

- "URL Option Selected (Attach Linked Object Dialog Box)" on page 388

Dialog Box Items

- **Member Combination**—Shows the member combination associated with the selected cell. The file that you selected is linked to the member combination shown.

- **Attachment Type**—Enables you to choose which kind of object to attach. Select the Cell note option to attach a cell note, select the File option to attach an external file, or select URL to link a URL.

Cell Note Option Selected (Attach Linked Object Dialog Box)

When the Cell Notes option is selected in the Attach Linked Object dialog box, these items are available:

- **Member Combination**—Shows the member combination associated with the selected cell. The file that you selected is linked to the member combination shown.

- **Cell Note**—Select to attach a cell note.

- **Cell Note**—Enables you to enter a comment for the data cell.

File Option Selected (Attach Linked Object Dialog Box)

When the File option in the Attach Linked Object dialog box is selected, these items are available:

- **Member Combination**—Shows the member combination associated with the selected cell. The file that you selected is linked to the member combination shown.

- **File**—Select to attach an external file.

- **File Name**—Enables you to enter the name of the file to attach.

- **Browse**—Click to select a file to attach.

URL Option Selected (Attach Linked Object Dialog Box)

When the URL option is selected in the Attach Linked Object dialog box, these items are available.

- **Member Combination**—Shows the member combination associated with the selected cell. The file that you selected is linked to the member combination shown.

- **URL**—Select to link a URL.

- **Location**—Enables you to enter the name of the URL to attach. The maximum number of characters you can enter is 512.

- **URL Description**—Enables you to enter a brief description of the URL you are linking. The maximum number of characters you can enter is 80.

View Cell Note Dialog Box

The View Cell Note dialog box enables you to view the contents of a cell note that is linked to a data cell. To change a cell note, close this dialog box and click the Edit button in the Linked Objects Browser dialog box.

Dialog Box Items

- **Member Combination**—Shows the member combination associated with the selected cell. You cannot edit the member combination in this dialog box.

  To move the cell note to another cell, first delete this cell note, and create a cell note in the desired cell.

- **Cell Note**—Shows the contents of the cell note. When you are done viewing, click OK to continue.

Related Topics

Edit Cell Note Dialog Box

The Edit Cell Note dialog box enables you to edit the contents of a cell note that is linked to a data cell.

Dialog Box Items

- **Member Combination**—Shows the member combination associated with the selected cell. You cannot edit the member combination in this dialog box.

  To move the cell note to another cell, first delete this cell note, and create a cell note in the desired cell.

- **Cell Note**—Enables you to edit the contents of the cell note. When finished editing, click OK to save your changes.

Related Topics

Edit URL Dialog Box

The Edit URL dialog box enables you to edit the URL that is currently associated with a data cell.

Dialog Box Items

- **Member Combination**—Shows the member combination associated with the selected cell. You cannot edit the member combination in this dialog box.

  To attach the URL to another cell, first delete the current URL, and attach a URL in the desired cell.

- **Location**—Enables you to edit the URL. When finished, click OK to save your changes. The maximum number of characters you can enter is 512.

- **URL Description**—Enables you to enter a description about the URL. When you are done, click OK to save your changes. The maximum number of characters you can enter is 80.

Related Topics

Essbase Currency Report Dialog Box

A Currency Conversion application consists of two databases: a main database, which contains data in local and converted values; and a currency rates database, which contains exchange rates. Converted values are derived by applying exchange rates from the currency rates database to local values from the main database.

To facilitate ad hoc currency reporting and analysis, Essbase enables you to interactively specify the exchange rates applied to your retrieval based on the four dimensions in a currency database: a currency name dimension; a time dimension; a currency type dimension; and a currency category dimension. The Essbase Currency Report dialog box enables you to focus on currencies, time periods, scenarios, and account categories.

Dialog Box Items

- **Current Setting Information**—Enables you to indicate the current currency setting, if one exists. The setting is displayed as a list of members from the currency database. (Members in the list are separated by an arrow, ->.)

- **Currency Name**—Select the currency types to convert data to the target currency name. If you do not select a currency name, the data is converted according to the default relationships defined in the databases.

- **Currency Type**—Select currency types, or scenarios, those are defined in the currency database to convert data to currencies. If you do not select a currency type, the data is converted according to the default relationships defined in the databases.

- **Currency Time**—Select to convert data to the rate of the time period. If you do not select a time period, the data is converted according to the default relationships defined in the databases.

- **Currency Category**—Select to convert data using a list of time periods that are defined in the currency database.

- **Apply**—Click to convert subsequent retrieval actions in a worksheet during the current session to the selected settings.

- **Clear**—Click to reset all settings in the list boxes to (none).

Member Information Dialog Box

The Member Information dialog box displays the information associated with the last selected member, such as dimension, generation, level, storage setting, formula, user-defined attributes, and comments for the member.

Dialog Box Items

- **Dimension**—Displays the dimension for which the selected member belongs.

- **Generation**—Displays the generation for which the selected member belongs.

- **Level**—Displays the level for which the selected member belongs.

- **Storage**—Displays the data storage attribute (for example, Dense) defined for the member. The Application Designer specifies the storage setting using Oracle Essbase Administration Services.

- **Formula**—Displays formulas associated with the member.

- **User Defined Attributes (UDA)**—Displays UDAs associated with the member.

- **Member Comment**—Displays comments about the member.

Member Criteria Shortcut Menu

A right mouse click in the Rules list box displays a shortcut menu to further define selection rules. You cannot apply subsets to other subsets. The menu items displayed in the shortcut menu

depend on the type of item you selected in the Rules list box. Table 40 lists which menu items are available when you select a member enter the Rules list box.

Table 40   Shortcut Menu Items For Member Types

Selected Member Type	Available Shortcut Menu Item	Description
Member Name	All Children	Selects all children of the selected member.
Member Name	All Children and Member	Selects all children of the selected member, including the member.
Member Name	All Descendants	Selects all descendants of the selected member.
Member Name	All Descendants and Member	Selects all descendants of the selected member, including the member.
Member Name, Generation Name, or Level Name	Subset	Opens the Subset dialog box to further define subset conditions.
Dynamic Time Series	Specify Latest	Opens the Select Latest Period dialog box to set or change the latest time period.

Note: For member names, you can select only one of the hierarchical selections: All Children, All Children and Member, All Descendants, and All Descendants and Members for each top-level item (the item you added from the Members list box). Selecting additional criteria replaces the previous criteria. For example, if you select All Children, and select All Descendants for the same item, Essbase replaces All Children with All Descendants.

Essbase Add-In Manager Dialog Box

The Essbase Add-In Manager enables you to install and configure custom add-ins developed with the Essbase API. For more information on developing custom add-ins, contact Oracle Corporation.

Related Topics

"Global Page (Essbase Options Dialog Box)" on page 374

Essbase System Login Dialog Box for Visual Explorer

Use the Essbase System Login dialog box to log on to an Essbase Server and work with Visual Explorer.

If you logged in to an Essbase Server from Excel, the connection information associated with the active Excel worksheet is automatically transferred to Visual Explorer.

If you are not logged in to an Essbase Server from Excel, you can connect to Essbase from Visual Explorer.

Note: See the online help that is accessed from the Help menu in Oracle Essbase Visual Explorer.

➤ To display this dialog box from Spreadsheet Add-in, select **Essbase**, and then **Visualize & Explore**. In Visual Explorer, select **File**, and then **Connect to Data Source**.

Dialog Box Items

- **Server**—Enables you to select the server to access. (If server names are not in the list, you can enter the name of the server). If you do not know the name of the instance of Essbase Server, contact the Essbase System Administrator.

- **Username**—Enables you to enter your user name. If you do not know your Essbase user name, contact the Essbase System Administrator.

- **Password**—Enables you to enter your password. If you do not know your Essbase password, contact the Essbase System Administrator.

- **Change Password**—Optional. Click to change your password.

- **Application/Database**—Displays a list of available application and database pairs. If you change Essbase Servers during a session, you can use the Update button to refresh the information in the list.

- **Update**—Optional. If you change Essbase Servers during a session, click to refresh the information in the Application/Database list.

- **Note**—Optional. Click to display Database Note dialog box. The Database Note dialog box displays a note for the active database.

Related Topics

Query Designer Dialog Boxes

Subtopics

- Open Query Dialog Box
- Save As Query Dialog Box

Open Query Dialog Box

The Query Designer Open Query dialog box retrieves saved queries. This feature is useful for reusing queries, or opening them for modification.

Dialog Box Items

- **Location**—Specifies the location of the query. Select Server or Client.

- **Query Name**—Enables you to enter the name of the query.

- **Query Objects**—Enables you to select from a list of available queries.

- **Connection Information**—Displays which server, application, and database that you are connected to.

- **Application**—Enables you to select from a list of applications that are available on the server or client.

- **Database**—Enables you to select from a list of databases that are available on the server or client.

- **Lock Object**—Enables you to lock a query so that no other user can modify it while you are using it.

- **File System**—Displays the Open dialog box to specify the location of the query. This button becomes available when you select the Client option in the Location group.

Related Topics

Save As Query Dialog Box

The Query Designer Save As dialog box enables you to save queries so that you can recall the query at a later date. Essbase saves queries with the extension EQD.

Notes:

- Changes to an outline may cause the queries to become obsolete. Essbase cannot automatically detect whether a query is obsolete based on the outline.

- To save data onto the server, you need a access permissions of database designer or higher. Contact the Essbase System Administrator.

Dialog Box Items

- **Location**—Specifies the location of the query. Select Server or Client.

- **Query Name**—Enables you to enter the name of the query.

- **Query Objects**—Enables you to select from a list of available queries.

- **Connection Information**—Displays which server, application, and database that you are connected to.

- **Application**—Enables you to select from a list of applications that are available on the server or client.

- **Database**—Enables you to select from a list of databases that are available on the server or client.

- **Lock Object**—Enables you to lock a query so that no other user can modify it while you are using it.

- **File System**—Displays the Save As dialog box to specify the location where you want to save the query. This button becomes available when you select the Client option in the Location group.

Related Topics

Drill-Through Dialog Boxes

Subtopics

- Drill-Through Login Dialog Box
- Select Drill-Through Report Dialog Box
- Drill-Through Wizard Dialog Box
- Drill-Through Wizard
- Drill-Through Cell
- Select Columns and Display Order Dialog Box
- Select Data Sort Order Dialog Box
- Order By Dialog Box
- Select Data Filters Dialog Box
- Set Filter on Column Dialog Box
- Operator List Box
- Select Filter Values from the List Dialog Box

Drill-Through Login Dialog Box

When you access drill-through from the Linked Objects Browser dialog box, you may be prompted by the display of the Drill-Through Login dialog box to log on to Integration Services and the relational data source for a drill-through report.

- **Integration Server Name**—Enter the Integration Server name.
- **Data Source Name** box—Displays the name of the SQL data source from which the data is retrieved for the drill-through report.
- **Username**—Enter your Integration Services user name.
- **Password**—Enter your Integration Services password.

Select Drill-Through Report Dialog Box

The Select Drill-Through Report dialog box displays the list of drill-through reports that are available for the cells you select in the spreadsheet. You can select a predefined drill-through report to execute or customize, depending on how the report was originally defined in Integration Services Console.

- **Available Reports**—Displays the predefined drill-through reports that are available for the cells that you select in the spreadsheet.

- **Execute**—Click to generate the drill-through report and display the results in the spreadsheet.

- **Customize**—Click to open the first dialog box of Drill-Through Wizard. If the report is not customizable, the button is unavailable.

Drill-Through Wizard Dialog Box

The Drill-Through Wizard dialog box is the first screen of the Drill-Through Wizard. This screen contains explanatory text about the basic functions of the wizard.

- **Back**—Click to move to the previous screen of the Drill-Through Wizard.

- **Next**—Click to move to the next screen of the Drill-Through Wizard.

- **Finish**—Click to generate the drill-through report and display the results in the spreadsheet.

Drill-Through Wizard

Drill-Through Wizard enables you to customize predefined drill-through reports. Drill-Through Wizard steps you through a process of selecting columns to retrieve from the relational data source, determining the display order of columns, defining a sort order for rows, and applying filters.

Drill-Through Cell

A drill-through cell represents the member intersection for which a drill-through report is defined. You can set a style for drill-through cells in Spreadsheet Add-in to identify the cells with drill-through reports attached to them.

Select Columns and Display Order Dialog Box

In the Select Columns and Display Order dialog box, you can select the columns to retrieve from the relational source for the drill-through report and specify their display order.

- **Report Name**—Displays the name of the drill-through report that you are customizing.

- **Available Columns**—Displays the columns that Integration Services retrieves from the relational source for the drill-through report. This list is defined by the person who originally defined the report in Integration Services Console.

- **Right Arrow**—Click to move a selected column to the list box on the right.

- **Left Arrow**—Click to move a selected column back to the list box on the left.

- **Right Double Arrow**—Click to move all columns to the list box on the right.

- **Left Double Arrow**—Click to move all columns back to the list box on the left.

- **Selected Columns**—Displays the columns from the Available Columns list box in expanded form. Use the arrows to move columns out of this list box. Use the Move Up and Move Down buttons to rearrange the display order of these columns.

- **Move Up**—Click to move a column up in the list box.

- **Move Down**—Click to move a column down in the list box.

- **Back**—Click to move to the previous screen of the Drill-Through Wizard.

- **Next**—Click to move to the next screen of the Drill-Through Wizard.

- **Finish**—Click to generate the drill-through report and display the results in the spreadsheet.

Select Data Sort Order Dialog Box

In the Select Data Sort Order dialog box, you can select a column and specify its sort order for the drill-through report.

- **Report Name**—Displays the name of the drill-through report that you are customizing.

- **Available Columns**—Displays the columns that you select in the Select Columns and Display Order dialog box. Select a column from this list box and move it to the Column list box to select a sort order for the column.

- **Right Arrow**—Click to move a selected column to the list box on the right.

- **Left Arrow**—Click to move a selected column back to the list box on the left.

- **Right Double Arrow**—Click to move all columns to the list box on the right.

- **Left Double Arrow**—Click to move all columns back to the list box on the left.

- **Column**—Double-click columns to change the data sort order from Ascending to Descending, or Descending to Ascending.

- **Order By**—Displays the data sort order for each column, as defined in Integration Services Console. Otherwise, the default sort order is Ascending. Double-click the column name to change the sort order.

- **Move Up**—Click to move a column up in the list box.

- **Move Down**—Click to move a column down in the list box.

- **Order By**—Click to select a data sort order for several columns simultaneously after selecting multiple columns from the Column list box.

- **Back**—Click to move to the previous screen of the Drill-Through Wizard.

- **Next**—Click to move to the next screen of the Drill-Through Wizard.

- **Finish**—Click to generate a drill-through report and display the results in the spreadsheet.

Order By Dialog Box

In the Order By dialog box, you can select a data sort order for all report columns simultaneously.

➤ To define the data sort order for multiple columns, select **Ascending** or **Descending** from **Item**.

Ascending Sort Order

If you select an Ascending sort order, the data is sorted in alphabetical (A - Z) or chronological (1, 2, 3, ...) order.

Descending Sort Order

If you select a Descending sort order, the data is sorted in reverse alphabetical (Z - A) or reverse chronological (… 3, 2, 1) order.

Multiple Filter Conditions

- **Combining multiple conditions**—Select And or Or in the Add Type box or enter AND or OR in the Filters box.

  The default value is Or. Integration Services applies the filter if the conditions you specify are met. If you select And, Integration Services applies the filter only if all conditions are met.

- **Determining the order in which the relational data source executes multiple conditions**— Enter parentheses around the conditions in the Filters box. How you define ordering depends on the relational data source. Consult the documentation for the relational data source.

Select Data Filters Dialog Box

In the Select Data Filters dialog box, you can apply filters to drill-through columns to determine what data Integration Services retrieves for the report.

- **Column**—Select a column to apply or define a filter for that column.
- **Condition**—Displays the filter string, if a filter is attached to the column.
- **Add Condition**—Click to create or edit a filter.
- **Clear**—Click to clear the filter conditions from the selected column.

  Note: Clicking Clear does not delete the permanently saved filters in the Filter list box.

- **Clear All**—Click to clear all filter conditions from all columns in the report.

  Note: Clicking Clear All does not delete the permanently saved filters in the Filter list box.

- **Filter**—Contains the list of saved filters. Click the arrow to view the list of available filters.
- **Description**—Enter a description for the filter selected in the Filter list box.
- **Condition**—Displays the conditions of the currently-selected column or filter.

- **Add New Filter**—Click to add a filter. When you click the Add New Filter button, the Filter Name dialog box is displayed. If you want to base the filter on the currently-selected filter, select Copy definition of current filter.

- **Delete**—Click to delete the filter displayed in the Filter list box.

- **Rename**—Click to display the Filter Name dialog box. Enter a name for the filter in Name and click OK.

- **Save Filters**—Click to save modifications to all filters created for this drill-through report.

- **Back**—Click to move to the previous screen of the Drill-Through Wizard.

- **Next**—Click to move to the next screen of the Drill-Through Wizard.

- **Finish**—Click to generate a drill-through report and display the results in the spreadsheet.

Set Filter on Column Dialog Box

In the Set Filter on Column dialog box, you can create a filter for a column that you select in the Select Data Filters dialog box. Filters determine what data Integration Services retrieves from the relational data source for the drill-through report.

- **Column**—Select the column to which the condition applies.

- **Operator**—Select from the list of filter operators to create the filter definition.

- **Condition**—Enter the condition or click $\boxed{...}$ to open the Select Filter Values from the List dialog box.

- **Add**—Click to add filter conditions to the Filters box.

- **Add Type** options—Select And or Or in the Add Type box or enter AND or OR in the Filters box.

  The default value is Or. Integration Services applies the filter if the conditions you specify are met. If you select And, Integration Services applies the filter only if all conditions are met.

  To determine the order in which the relational data source executes multiple conditions, enter parentheses around the conditions in the Filters box. How you define ordering depends on the relational data source. Consult the documentation for the relational data source.

- **Filters**—To create a filter, use one method:
  - Build the filter interactively by selecting the operator to use from the Operator list box.
  - Enter the filter directly into the Filters box, using the SQL syntax supported by the relational data source.

Operator List Box

To build a filter interactively, select one filter operator from the Filter Operators table:

Table 41   Filter Operators

Operator	Description
in	Enables you to select one or more conditions; for example, Region in United States and Europe selects the United States and Europe regions.
not in	Opposite of in; for example, Region not in United States selects all regions except for the regions that are part of the United States.
like	Enables you to use the wildcard characters, % and *, at the end of an expression to find data that matches the characters in the string that you typed. For example, if the database includes 100-10, 100-20, 100-30, 100-10-10, and 100-10-20, 100-10% returns 100-10, 100-10-10, and 100-10-20.
not like	Opposite of like; for example, if the database includes 100-10, 100-20, 100-30, 100-10-10, and 100-10-20, not 100-10% returns 100-20 and 100-30.
=	Equal to.
<>	Not equal to.
<	Less than.
<=	Less than or equal to.
>	Greater than.
>=	Greater than or equal to.

Select Filter Values from the List Dialog Box

The "Select Filter Values from the List" dialog box lists all possible values for that column. Integration Services retrieves these values directly from the relational data source. If the relational data source contains many values, Oracle Essbase Integration Services confirms whether to view them all before displaying the list.

E Accessibility

Oracle Essbase Spreadsheet Add-in is not itself accessible; however, because it is an Excel plug-in, you can take advantage of the accessibility features in Excel. See the documentation provided with Excel for information on Excel accessibility features.

This appendix lists all keyboard shortcuts available for users.

Essbase Menu Keyboard Shortcuts

Table 42 lists the keyboard shortcuts for the commands found on the Oracle Essbase menu.

For example, to retrieve data using the keyboard shortcut for the Retrieve command, press Alt+s+r.

Table 42 Essbase Commands

Command	Keyboard Equivalent
Retrieve	Alt+s+r
Keep Only	Alt+s+k
Remove Only	Alt+s+o
Zoom In	Alt+s+i
Zoom Out	Alt+s+z
Pivot	Alt+s+v
Navigate Without Data	Alt+s+g
Sample Data (Zoom In)	Alt+s+a
Linked Objects	Alt+s+j
Query Designer	Alt+s+q

Command	Keyboard Equivalent
Visualize & Explore	Alt+s+x
FlashBack	Alt+s+b
Options	Alt+s+p
Member Selection	Alt+s+m
Currency Report	Alt+s+y
Cascade	Alt+s+d
Retrieve & Lock	Alt+s+e
Lock	Alt+s+l
Unlock	Alt+s+u
Send	Alt+s+s
Calculation	Alt+s+c
Connect	Alt+s+n
Disconnect	Alt+s+t

Query Designer Keyboard Shortcuts

For accessibility, each of the keystroke combinations in Table 43 enables users to move from one element to another in the navigation panel, move from the navigation panel to the properties panel, or access items on shortcut menus.

For example, to save a query using the keyboard equivalent for the Save Query command, press Shift+F10 , and then from the shortcut menu that is displayed, press v.

Table 43   Query Designer Keyboard Shortcuts

Action	Keyboard Equivalent	Notes
To navigate the tree in the navigation panel	Up and down arrow keys; Home and End keys.	When starting Query Designer, focus is set to the first item in the navigation panel.
To switch between the navigation panel and the properties panel	Ctrl+Tab	
To navigate within the properties panel	Tab	For example, use Tab to access the members in the Selection Rules list box.

Action	Keyboard Equivalent	Notes
To access a open shortcut menus from items in the tree in the navigation panel	Shift+F10, and access menu items in one of two ways: ● Use the up and down arrow keys to navigate within the shortcut menu. Press Enter to select a menu item. ● Enter the underlined letter on the menu item. The underlined letter designates the keyboard shortcut.	For example, to open a query, enter Shift +F10+o. This action opens the Open Query dialog box. Depending on the element selected in the navigation panel or properties panel, this keystroke sequence accesses various menus.
To move a member to another layout in the layout properties panel	Select the member in the navigation pane, then press Shift+F10 to access the shortcut menu. In the shortcut menu, press m, and press r.	For example, use the shortcut to move from an item in a page or row dimension to the column dimension.

Table 44 lists common keyboard shortcuts for navigation panel elements.

Note: Commands that are unavailable do not apply to the selected element.

Table 44   Common Keyboard Shortcuts for Query Designer Navigation Panel Elements

Menu Item	Keyboard Equivalent	Notes
New	Shift+F10+n	Opens a second shortcut menu with these options: w Workbook s Worksheet q Query d Data Restriction r Sorting Rule
Select Active Sheet	Shift+F10+s	
Retrieve	Shift+F10+r	
Apply Query	Shift+F10+a	
Open Query	Shift+F10+o	
Save Query	Shift+F10+v	
Save Query As	Shift+F10+u	
Close Query	Shift+F10+y	
Connect	Shift+F10+c	
Disconnect	Shift+F10+d	

Table 45 lists commands for Dimension and Attribute Dimension elements in the navigation panel.

Table 45   Query Designer Keyboard Shortcuts for Dimension and Attribute Dimension Elements

Menu Item	Keyboard Equivalent	Notes
Move to	Shift+F10+m	Opens a second shortcut menu with these options: p Page r Row c Column a Available Dimensions

Table 46 lists commands for the Data Filtering element or data filters in the navigation panel.

Table 46   Query Designer Keyboard Shortcuts for Data Filtering Elements and Data Filters

Menu item	Keyboard Equivalent
Move Data Restriction Up	Shift+F10+m
Move Data Restriction Down	Shift+F10+r
Delete Data Restriction	Shift+F10+d
Delete All Data Restrictions	Shift+F10+d

Table 47 lists commands for the Data Sorting element or sorting rules (navigation panel).

Table 47   Keyboard Shortcuts for Data Sorting Elements and Sorting Rules

Menu Item	Keyboard Equivalent
Move Sorting Rule Up	Shift+F10+m
Move Sorting Rule Down	Shift+F10+l
Delete Sorting Rule	Shift+F10+d
Delete All Sorting Rules	Shift+F10+d

Table 48 lists commands for Members in the member select panel (properties panel).

Table 48   Query Designer Keyboard Shortcuts for Members

Menu Item	Keyboard Equivalent	Notes
Add to Selection Rules	Shift+F10+r	
Member Information	Shift+F10+i	
Find	Shift+F10+f	

Menu Item	Keyboard Equivalent	Notes
View by	Shift+F10+v	Opens a second shortcut menu with these options: n Name g Generation l Level d Dynamic Time Series
Suppress Shared Members	Shift+F10+s	
Aliases	Shift+F10+a	Opens a second shortcut menu with these options: ● None ● Default ● Long names Use the arrow keys to navigate within the shortcut menu, and then press Enter to select an option.
Expand to Children	Shift+F10+e	
Expand to Descendants	Shift+F10+x	

Table 49 lists commands for Selection Rules in the member select panel (properties panel).

Table 49   Query Designer Keyboard Shortcuts for Selection Rules

Shortcut Menu Item	Keyboard Equivalent	Notes
New Member Filter	Shift+F10+n	
Preview	Shift+F10+p	
Select	Shift+F10+s	Opens a second shortcut menu with these options: m Member c Children h Children and Member d Descendants b Descendants and Member
View Qualified Name	Shift+F10+q	
Delete Selection Rule	Shift+F10+l	
Delete All Rules	Shift+F10+a	

Table 50 lists commands for Data Restrictions in the data filter panel (properties panel).

Table 50   Query Designer Keyboard Shortcuts for Data Restrictions

Shortcut Menu Item	Keyboard Equivalent
New Data Restriction	Shift+F10+w
Delete Data Restriction	Shift+F10+l
Delete All Data Restrictions	Shift+F10+a

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